This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google™ books

https://books.google.com

GEOGRAPHICAL
HANDBOOK
SERIES

CORSICA

NAVAL INTELLIGENCE DIVISION

STANFORD UNIVERSITY LIBRARIES

STANFORD UNIVERSITY
JAN 1973
STACKS
LIBRARY

B.R. 508

GEOGRAPHICAL HANDBOOK SERIES

CORSICA

November 1942

Gt. Brit.
"

NAVAL INTELLIGENCE DIVISION

RIK

WITHDRAWN
H.M. STATIONERY OFFICE

This book is for the use of persons in H.M. Service only and must not be shown, or made available, to the Press or to any member of the public.

DC611
C81G68

PREFACE

IN 1915 a Geographical Section was formed in the Naval Intelligence Division of the Admiralty to write Geographical Handbooks on various parts of the world. The purpose of these handbooks was to supply, by scientific research and skilled arrangement, material for the discussion of naval, military, and political problems, as distinct from the examination of the problems themselves. Many distinguished collaborators assisted in their production, and by the end of 1918 upwards of fifty volumes had been produced in Handbook and Manual form, as well as numerous short-term geographical reports. The demand for these books increased rapidly with each new issue, and they acquired a high reputation for accuracy and impartiality. They are now to be found in Service Establishments and Embassies throughout the world, and in the early years after the last war were much used by the League of Nations.

The old Handbooks have been extensively used in the present war, and experience has disclosed both their value and their limitations. On the one hand they have proved, beyond all question, how greatly the work of the fighting services and of Government Departments is facilitated if countries of strategic or political importance are covered by handbooks which deal, in a convenient and easily digested form, with their geography, ethnology, administration, and resources. On the other hand, it has become apparent that something more is needed to meet present-day requirements. The old series does not cover many of the countries closely affected by the present war (e.g. Germany, France, Poland, Spain, Portugal, to name only a few); its books are somewhat uneven in quality, and they are inadequately equipped with maps, diagrams, and photographic illustrations.

The present series of Handbooks, while owing its inspiration largely to the former series, is in no sense an attempt to revise or re-edit that series. It is an entirely new set of books, produced in the Naval Intelligence Division by trained geographers drawn largely from the Universities, and working at sub-centres established at Oxford and Cambridge, and is printed by the Oxford and Cambridge University Presses. The books follow, in general, a uniform scheme though minor modifications will be found in particular cases; and they are furnished with numerous maps and illustrations. At the present time books covering over thirty-five countries are in course of preparation, and this list will be substantially extended by the end of 1942.

The purpose of the books is primarily naval. They are designed first to provide, for the use of Commanding Officers, information in a comprehensive and convenient form about countries which they may be called upon to visit, not only in war but in peace-time; secondly, to maintain the high standard of education in the Navy and, by supplying officers with material for lectures to naval personnel ashore and afloat, to ensure for all ranks that visits to a new country shall be both interesting and profitable.

Their contents are, however, by no means confined to matters of purely naval interest. For many purposes (e.g. history, administration, resources, communications, etc.) countries must necessarily be treated as a whole, and no attempt is made to limit their treatment exclusively to coastal zones. It is hoped therefore that the Army, the Royal Air Force, and other Government Departments (many of whom have given great assistance in the production of the series) will find these Handbooks even more valuable than their predecessors proved to be both during and after the war of 1914–18.

This volume has been prepared for the Naval Intelligence Division at the Cambridge sub-centre (Director, Mr J. M. Wordie; General Editor, Dr H. C. Darby). It has been written by Mr F. J. Monkhouse, with contributions by Professor P. A. Buxton and Mr F. W. Morgan. The maps and diagrams have been executed by Miss Margaret Alexander, Miss K. S. A. Froggatt, Miss F. Hands, Mr C. R. Haynes and Mrs Gwen Raverat.

J. H. GODFREY
Director of Naval Intelligence

November 1942

CONTENTS

PREFACE PAGE iii

LIST OF MAPS AND DIAGRAMS vii

LIST OF PLATES ix

I. INTRODUCTION 1

Situation, Size, etc.: Administration (1939): The Vichy Regime

II. PHYSICAL DESCRIPTION 4

Structural Evolution: Western Corsica: North-eastern Corsica: East Coast Plain: The River System: Regional Divisions

III. COASTS 26

General Features: Coast of Cap Corse: North-west Coast: West Coast: South-west Coast: South-east Coast: East Coast: Note on Lighthouses

IV. CLIMATE 50

General Factors: Pressure and Winds: Temperature: Visibility: Clouds: Rainfall: Snowfall: Summary

V. FLORA AND FAUNA 67

General Features: Woodland: *Maquis*: Pasture: Alpine Vegetation: Swamp Vegetation: Fauna

VI. PUBLIC HEALTH 75

Administration: Vital Statistics: Causes of Death: Special Diseases: Water Supply and Sanitation: Measures for the Preservation of Health

VII. HISTORICAL OUTLINE 84

Early History: The Early Middle Ages (to 1347): The Domination of Genoa: The French Revolution and the Napoleonic Wars: Corsica and Fascist Italy: The Vichy Regime

VIII. THE PEOPLE 95

General Features: Urban and Rural Population: Altitudinal Distribution: Changes of Population: Foreign Population: Settlements and Houses: Racial Features: Banditry and the *Vendetta*: Language: Religion: Education

IX. ECONOMIC GEOGRAPHY PAGE 119
Agriculture: Fishing: Industries: Power: Mines and Quarries: Tourist Industry: Conditions under the Vichy Regime

X. COMMUNICATIONS 139
Maritime Connexions: Air Services: Roads: Railways: Signal Communications: Note on Time

XI. PORTS AND COMMERCE 159
General Features: Bastia: St Florent: Ile-Rousse: Calvi: Ajaccio: Propriano: Bonifacio: Porto-Vecchio: Shipping and Commerce: The Balance of Trade

BIBLIOGRAPHY 181

APPENDICES

I. Maps of Corsica 187
II. Table of Administrative Divisions 193
III. Table of Communes 194
IV. Anchorages 196
V. West-east Routes across Corsica 202
VI. Route Itineraries 203
VII. Note on Place-names 208

CONVERSION TABLES 210

INDEX 227

MAP OF CORSICA *in pocket at end*

LIST OF MAPS AND DIAGRAMS

PAGE
1. Administrative divisions 2
2. Relief 5
3. Geology 7
4. Generalized map of the main ridges, peaks and valleys 9
5. The south coast 10
6. The mountains above Ota 11
7. The coastline of the Golfe d'Ajaccio 13
8. Hills in the Cap Corse peninsula 15
9. The geological structure of Cap Corse 16
10. The east coast near the Golo delta 17
11. The Étang de Biguglia 18
12. The river system 19
13. The basin of the river Liamone 21
14. Regional divisions 24
15. Submarine contours in the vicinity of Corsica 27
16. Generalized map of the coastline 28
17. Key map to coastal description 30
18. Ports, lights and anchorages 32
19. The coast of Cap Corse near Losse 33
20. The head of the Golfe de Porto 39
21. The limestone cliffs at Bonifacio 43
22. Mean seasonal pressure distribution (reduced to sea level) in the western Mediterranean region 51
23. Passage of a depression in the western Mediterranean region 52
24. Frequency and force of seasonal winds at three Corsican stations 54
25. Local winds in the western Mediterranean region 56
26. Isotherms for January and July (reduced to sea level) in the western Mediterranean region 59
27. Seasonal rainfall 62
28. Mean annual distribution of rainfall 63
29. Distribution of woodland 69
30. A Corsican cork oak forest 70
31. Shepherds' huts near the Col de Bavella 71
32. A series of maps to illustrate the history of Corsica from *c.* A.D. 300 to *c.* A.D. 900 85
33. A series of maps to illustrate the history of Corsica from *c.* A.D. 1100 to A.D. 1769 87
34. Towns and large villages with an agglomerated population of more than 1,000 inhabitants, 1936 97
35. Percentage of population by cantons living in dispersed hamlets or in isolated dwellings, 1936 99
36. General distribution of population by communes, 1931 100
37. Altitudinal distribution of population in north-eastern and in south-western Corsica, and in the *Chataigneraie* 102

PAGE
38. Graphs to show population changes, 1870–1936, in Corsica and in Ajaccio and Bastia 104
39. Percentage population changes by cantons, 1906–36 107
40. Corte, viewed from the south 110
41. Tolla 112
42, 43. Streets in Corte and Bastia 113
44. The grid system 134
45. Mines, quarries and mineral springs 136
46. Maritime and air communications 140
47. Roads 142
48. The transport of charcoal by ox-wagon 143
49. A mule-track in the Tavignano gorge 144
50. Post-auto routes, 1939 146
51. Railways 150
52. Routes in the Vecchio valley 153
53. The road and railway bridges between Vivario and Venaco 154
54. The railway viaduct near Ponte-Nuovo 155
55. Key to port plans (Figs. 56–62) 160
56. Bastia 161
57. St Florent 163
58. Ile-Rousse 165
59. Calvi 167
60. Ajaccio 169
61. Propriano 171
62. Bonifacio 173
63. Porto-Vecchio 175
64. Index maps to the 1:80,000, 1:100,000 and 1:200,000 official topographical sheets of Corsica 189

LIST OF PLATES

1. General view of Ajaccio *facing page* 4
2. The upper Tavignano valley 5
3. Capo alla Vetta (near Evisa) 8
4. Peaks above the Asco valley 8
5. Mt d'Oro 9
6. Mt Cinto and Capo al Ciuntrone 9
7. Capo al Dente 12
8. A weathered granite boulder near Piana 12
9. Paglia Orba 13
10. Peaks and passes at the head of the Golo valley 13
11. Hills in the Cap Corse peninsula above Rogliano 16
12. The interior of Corsica, near Noceta 16
13. Wooded valleys of the south-west, near Sartène 17
14. Part of the east coast plain 17
15, 16. Baie de Macinaggio 28
17. Cap Corse and the Ile de la Giraglia 29
18. The coast of Cap Corse near Nonza 29
19. Marine d'Albo 32
20. The head of the Golfe de St Florent 32
21. The lighthouse on Grande Ile-Rousse 33
22. Golfe de Calvi 33
23. Pte St François and the town of Calvi 36
24. Golfe de Porto and the Calanques de Piana 36
25. The head of the Golfe de Porto 37
26. A landing-stage near the head of the Golfe de Porto 37
27. Baie de Cargèse 40
28. Golfe de Sagone 40
29. Pte della Parata and the Iles Sanguinaires 41
30. The 'Route des Sanguinaires' 41
31. Golfe d'Ajaccio 44
32. Campo dell' Oro 45
33. Baie de Bonifacio 45
34. Limestone cliffs near Bonifacio 48
35. The entrance to the Dragonetta cavern, near Bonifacio 48
36. The head of the Golfe de Porto-Vecchio 49
37. Forêt de Valdo-niello 66
38. Forêt de Vizzavone 66
39. The eastern slopes of Paglia Orba 67
40. Mt Tozzo 67
41. Forêt d'Aïtone and the Col de Vergio 72
42. *Maquis* near Palasca 72
43. Ota 73
44. *Garrigue* near Bonifacio 73
45. The *citadelle* at Calvi 90

46. The *citadelle* at Bonifacio *facing page* 90
47. The *citadelle* at Corte 91
48. Asco 91
49. Sartène 110
50. Calacuccia 110
51. The church at Piana 111
52. Houses at Piana 111
53. A street in Ajaccio 114
54. Place St Nicolas, Bastia 114
55, 56. Corsican country women 115
57. Fishermen at Albo 128
58. A load of cork at Porto-Vecchio 128
59. Land utilization near Corte 129
60. Olive groves near Ajaccio 138
61. The Hôtel Napoléon Bonaparte at Ile-Rousse 138
62. A section of the Ajaccio conduit 139
63. The 'Route de Cap Corse' near Albo 139
64. The coast road near Piana 144
65. Col de Teghime 145
66. Col de Vizzavone 145
67. The Golo bridge at Ponte-Nuovo 148
68. The Tavignano bridge at Corte 148
69, 70. Railcars at Calvi and Corte 149
71. General view of the Port St Nicolas, Bastia (looking north-east) 158
72. The 'Sampiero' at Bastia (looking south-west) 158
73. Bastia: the Avant-port and the Vieux Port (looking north) 159
74. Bastia: the Vieux Port (looking south) 159
75. The quays at St Florent 162
76. The harbour at Calvi (looking north-east) 162
77. Ile-Rousse: the causeway and mole (looking east) 163
78. Calvi: the waterfront (looking east) 166
79. Ajaccio: the *citadelle* and the Mouillage de la Ville (looking north-east) 167
80. General view of the port of Ajaccio (looking north) 170
81. The fishing harbour at Ajaccio (looking north-west) 170
82. The waterfront at Ajaccio (looking north-west) 171
83. The naval air base at Aspreto 171
84. Propriano (looking south) 178
85. The entrance to the Baie de Bonifacio (looking south-west) 178
86. The port at Bonifacio (looking east from the *citadelle*) 179

Chapter I

INTRODUCTION

Situation, Size, etc.: Administration (1939): The Vichy Regime

SITUATION, SIZE, ETC.

Corsica, one of the ninety departments of France, is an island in the western Mediterranean Sea between latitudes 41° 22′ and 43° 02′ N, and between longitudes 8° 36′ and 9° 34′ E of Greenwich. It is situated about 170 km. from the nearest point of the mainland of France, about 450 km. from Spain, about 460 km. from Tunis, about 80 km. from mainland Italy, and about 12 km. across the Straits of Bonifacio from Sardinia. To the east is the Tyrrhenian Sea, to the north is the Ligurian Sea, and to the west is the western Mediterranean Sea proper.

The island is oval in shape, with its greatest length (183 km.) from north to south, and its greatest width 83·5 km. Its area is 8,722 sq. km., that is, about 1·6 % of the total area of France; it is the sixth largest department. Included in this figure are forty-three named islands, but their total area is only 3·29 sq. km.; the largest are the Ile de Cavallo (0·88 sq. km.) and the Ile de Lavezzi (0·49 sq. km.), both situated in the Straits of Bonifacio.

ADMINISTRATION (1939)

Corsica forms a single department within the internal administration of France; the prefecture is at Ajaccio (Plates 1, 31, 79). The island is divided into the four arrondissements of Ajaccio, Bastia, Corte and Sartène, with sub-prefectures at the towns of those names. Until 1926 there was a fifth arrondissement, that of Calvi, but this was abolished by decree and its six cantons added to Bastia. The arrondissements are divided into sixty-two cantons (see Appendix II, p. 193, and Fig. 1), and these in turn are made up of 364 communes, as follows:

Arrondissement	Area of arrondissement sq. km.	No. of cantons	No. of communes
Ajaccio	2,192	12	80
Bastia	2,214	26	129
Corte	2,486	16	108
Sartène	1,830	8	47
Total	8,722	62	364

Source: *Enciclopedia Italiana*, vol. XI, p. 512 (Milan, 1931).

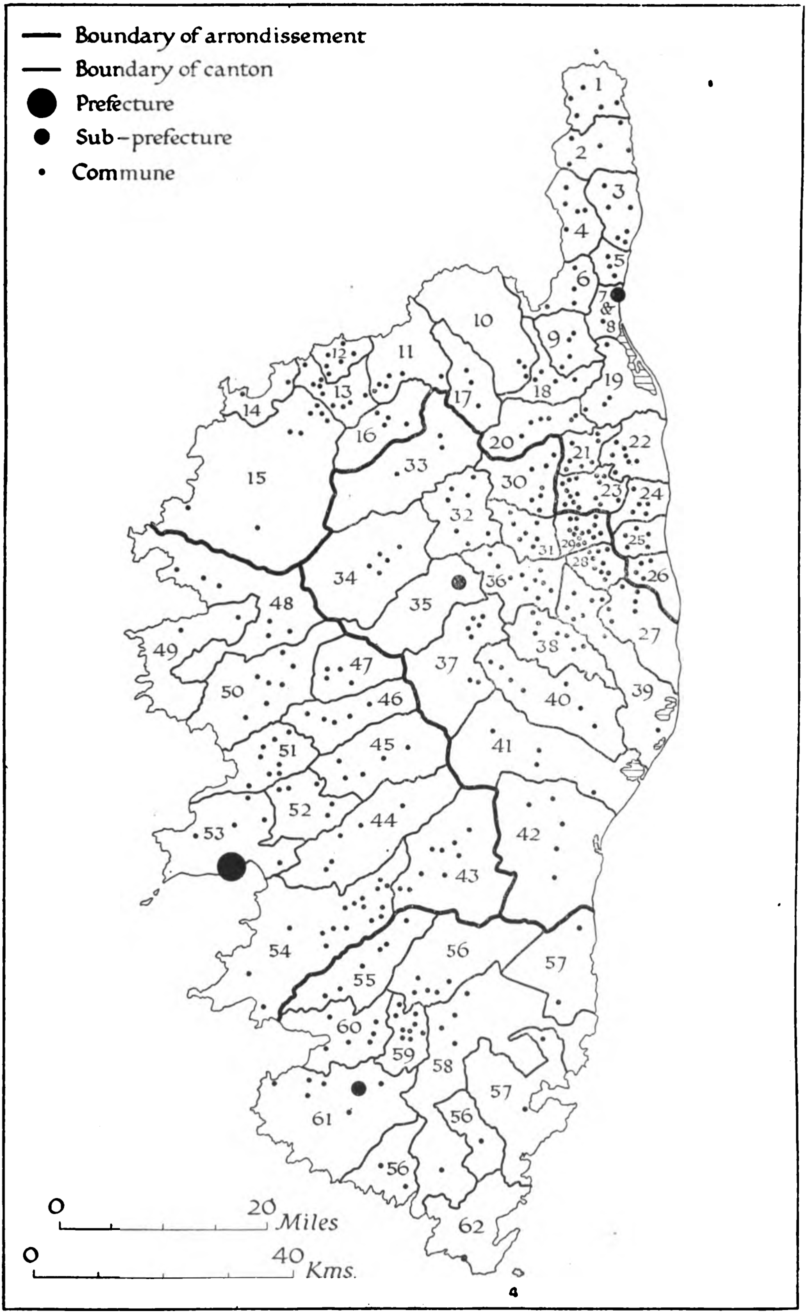


Fig. 1. Administrative divisions

The four arrondissements from north to south are Bastia, Corte, Ajaccio and Sartène. The cantons are numbered to correspond to the table, Appendix II (p. 193). The small black dots denote the nucleated centres of the communes.

It will be seen from the following table that almost one-third of the communes are between 10 and 20 km. in area; the average area of a commune is about 24 sq. km.:

Area of commune sq. km.	Ajaccio	Bastia	Corte	Sartène	Total
0–5	4	25	26	4	59
5–10	10	34	23	8	75
10–20	23	43	26	13	105
20–30	17	14	9	6	46
30–40	11	5	5	2	23
40–50	5	2	4	4	15
50–75	7	2	7	2	18
75–100	2	—	5	3	10
Over 100	1	4	3	5	13
Total	80	129	108	47	364

Source: M. G. Anfossi, 'Recherches sur la distribution de la population en Corse' in *Revue de Géographie Alpine*, vol. VI (Grenoble, 1918).

The departmental administration of Corsica and its relations with the central government of France before 1940 are described in the Handbook on France, Vol. II, Chapters IV–VI and Appendix I. The department is represented in the French parliament by three senators and four deputies.

For various administrative purposes, Corsica is included in the following regions: the 'academy' and ecclesiastical province of Aix; the 3rd Maritime Region, centred at Toulon; and the 15th Army Area, the 11th Economic Region; the 30th 'Conservation forestière' of the 'Administration des Eaux et Forêts', and the 14th 'Inspection générale des Ponts et Chaussées', all with headquarters at Marseilles (see *op. cit.* Figs. 12–14, 49, 53–4).

THE VICHY REGIME

Changes introduced into the central and departmental administration by the Vichy government are also described in the same Handbook. Under the temporary regional organization of 1941, Corsica was included in the Marseilles region (*op. cit.* Fig. 55.)

Chapter II

PHYSICAL DESCRIPTION

Structural Evolution: Western Corsica: North-eastern Corsica: East Coast Plain: The River System: Regional Divisions

Corsica is predominantly mountainous. Less than 30% of its area is below 200 m. above sea level, and nearly 20% is over 1,000 m. (Fig. 2). The mean height of the island has been calculated to be 568 m. But while there are more than forty summits over 2,000 m., there are no heights comparable to those of the Alps; the Alpine ranges have some seventy peaks above 4,000 m., whereas the highest in Corsica is Mt Cinto (2,710 m.). As a result, there is little permanent snow, and there are no glaciers.

The typically mountainous nature of the interior is illustrated by Fig. 6 and by Plates 2–10.

STRUCTURAL EVOLUTION

It is generally considered that the island mainly owes its present form to the earth movements which produced the Alpine mountain system. In the seas which once lay between the rigid mass of the old Hercynian continent of Europe and that of Africa to the south, there accumulated great thicknesses of sediment, which were compressed and folded up during the earth movements of Tertiary times. The great stresses produced extensive fracturing and instability, which caused the sinking of large areas of land and thus formed the basin of the western Mediterranean Sea. Corsica is a residual mass made up of structural elements of both the old continent and the newer folded zone.

Western Corsica and Sardinia are the foundered remnants of the edge of the crystalline continent; they are similar in structure and geology to the massifs of Mt Blanc or Mt Pelvoux and to the old blocks of Maures and Esterel. The north-eastern part consists largely of folds made of metamorphosed *schistes lustrés* characteristic of the Briançonnais zone in the French Alps. These two areas are separated by a great thrust plane, along which the *schistes lustrés* have been pushed westwards; the outcrop of the thrust plane runs approxi-

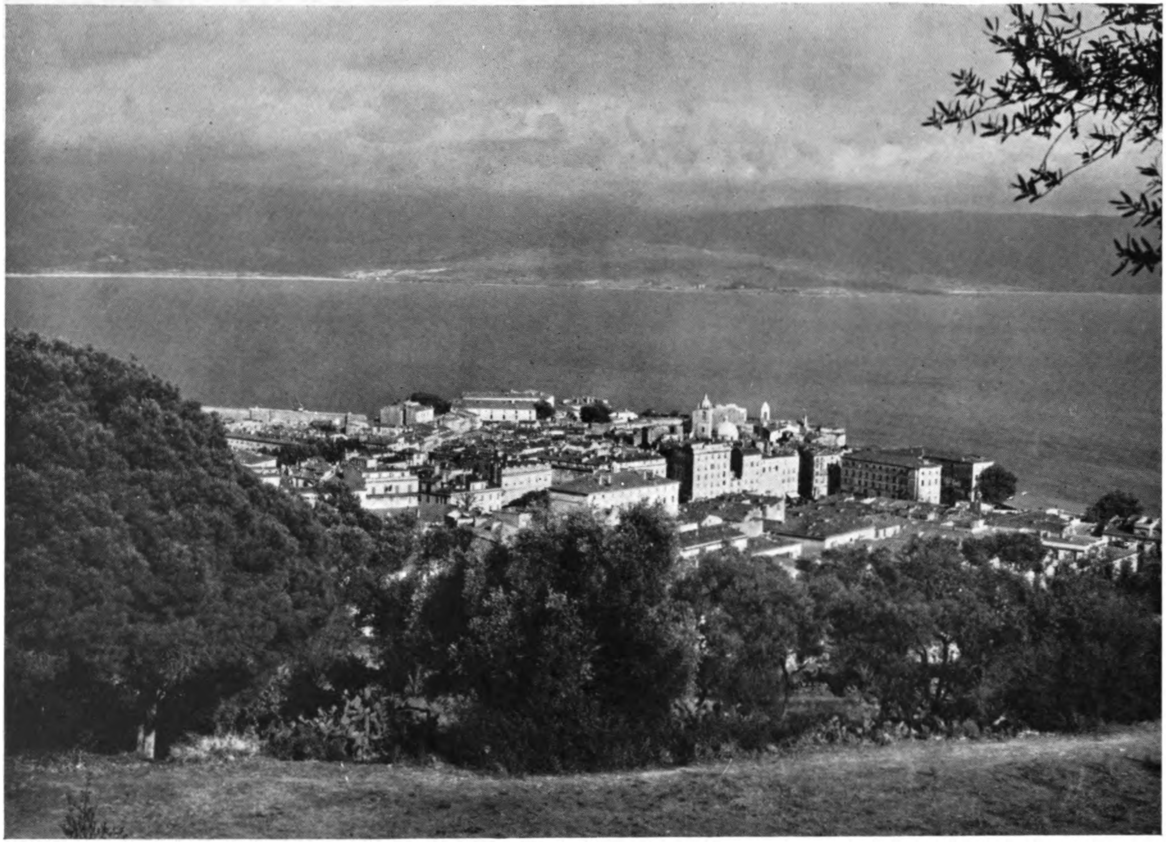


Plate 1. General view of Ajaccio

Plate 2. The upper Tavignano valley

Much of central Corsica consists of rugged mountains, covered with pine forests and *maquis*. Large parts are completely unpopulated. The streams, torrential and often unfordable in winter, degenerate in summer into a string of pools, as in this photograph.

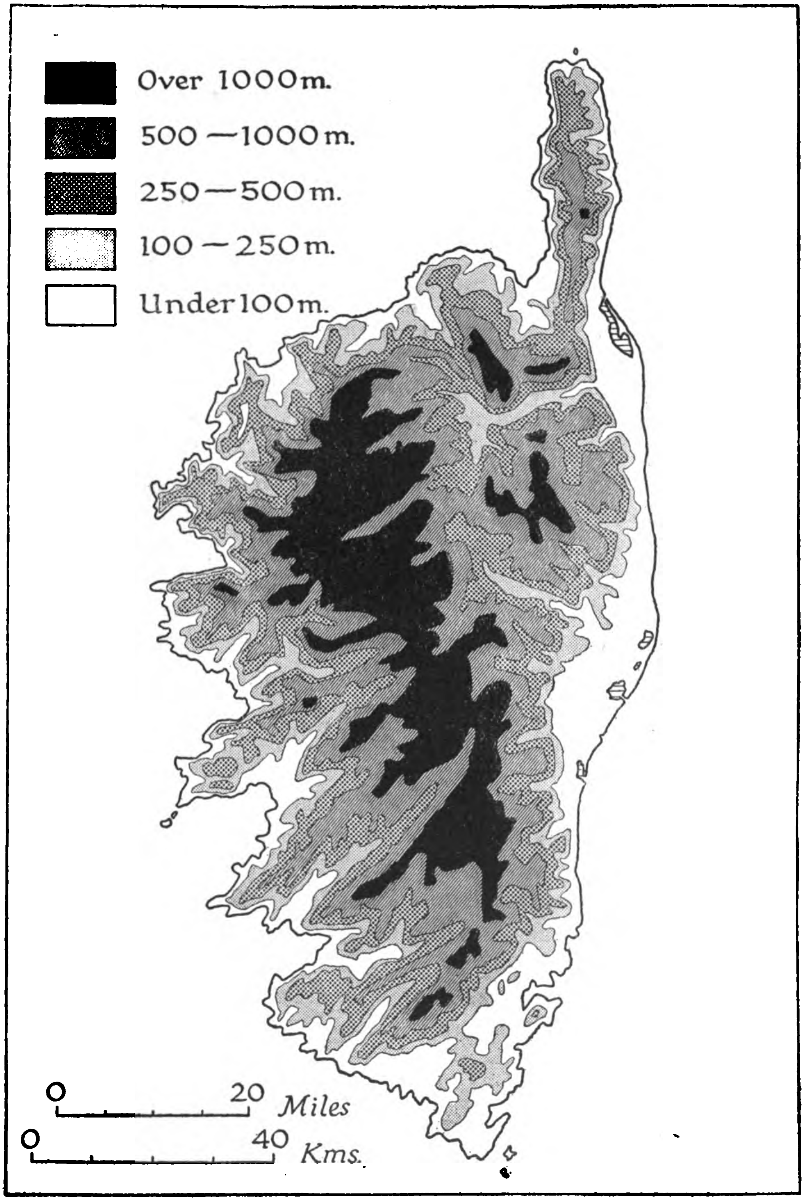


Fig. 2. Relief

Based on the *Atlas de France*, Plate 6 (Paris, 1933).

mately from north-west to south-east, and can be traced on Fig. 3 along the eastern boundary of the granitic rocks.

There is some dispute about the exact relation of the folded ranges and of the ancient masses in the Mediterranean region. The general consensus of opinion is that foundering left only the outer arcs of a wide belt of folds, thus forming long mountain ranges curving through Italy, Sicily and North Africa. The inner arc, a continuation of the Maritime Alps of Provence, is represented now only by north-eastern Corsica and by the Tuscan islands.

In both of these regions the strains and stresses of the movements were accompanied by igneous activity, in the form of basic intrusions into the surrounding rocks; the intrusions were later exposed by erosion to form massifs of gabbro, peridotite, serpentine, etc. In some areas rhyolite lavas have been extruded, and form an important feature of the relief. None of this igneous activity occurred in geologically recent times.

Later fracturing and sinking formed the shallow Straits of Bonifacio, and so separated the blocks of western Corsica and Sardinia, producing the present form of the island.

In addition to the two major structural regions, a third much less important one may be distinguished. It consists of a relatively narrow coastal plain from Solenzara to Bastia, which has been built out into the sea by the deposition of river-borne alluvium.

WESTERN CORSICA

More than two-thirds of the island consists of a granitic massif (Fig. 3), with clearly defined margins on the west and north rising abruptly from submarine depths exceeding 2,000 m. (Fig. 15) On the east there is a complicated geological boundary along the thrust plane which marks the edge of the folded north-eastern area. Along this boundary may be traced a chain of river basins from the river Ostriconi via Corte to Solenzara, forming an indeterminate depression or 'Central Furrow'. This is by no means continuous and is interrupted by cols, but it is generally lower than the uplands to the west and east. A submergence of about 600 m. would turn it into a strait 8–12 km. wide.

The predominant rocks are mainly crystalline, but there are also some small and generally insignificant patches of newer sediments. The more important of these include (1) a small basin of coal measures near Osani on the west coast, (2) the level-bedded Miocene limestones

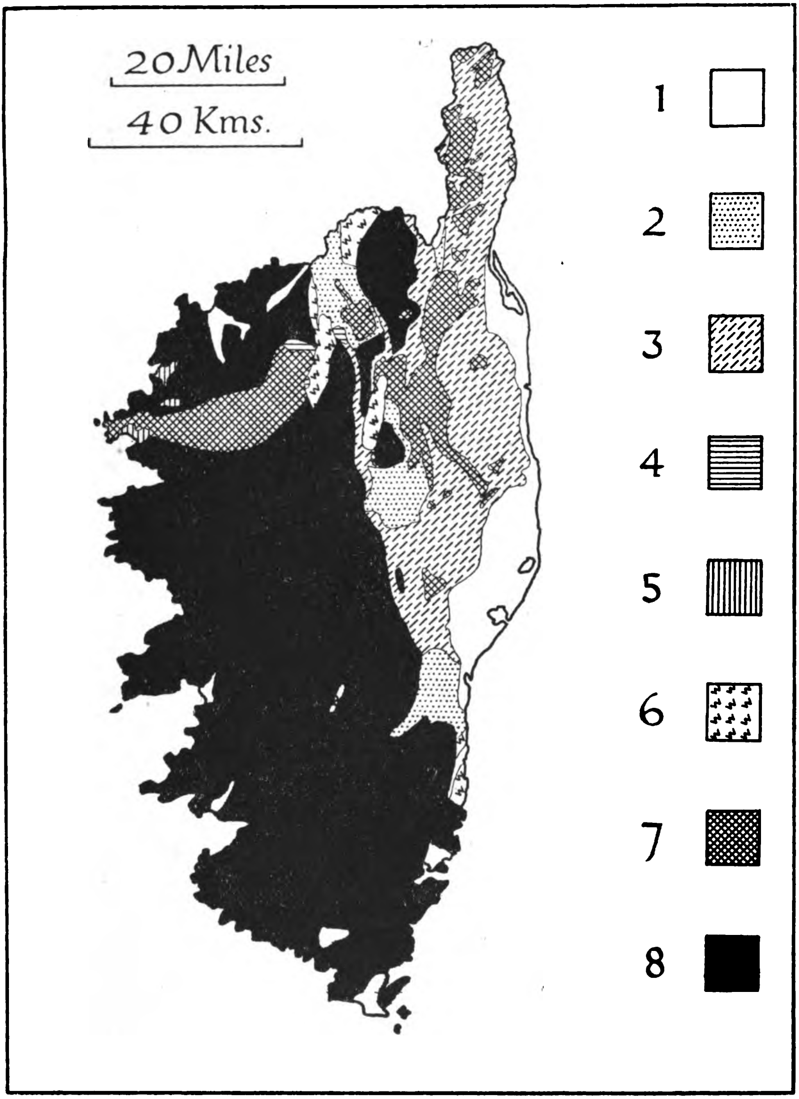


Fig. 3. Geology

1. Newer Tertiary and Quaternary.
2. Older Tertiary.
3. Trias (*schistes lustrés*).
4. Upper Palaeozoic.
5. Lower Palaeozoic.
6. Pre-Cambrian.
7. Igneous rocks other than granite.
8. Granites.

Based on (1) *Atlas de France*, Plate 7 (Paris, 1939); (2) 1:500,000 *Carte géologique*, Sheet XII S.E. (Paris, n.d.); (3) 1:80,000 *Carte géologique detaillée*, Sheets 259–67 (Paris 1873–9, some sheets revised 1901).

of Bonifacio which form vertical or overhanging cliffs (Figs. 5, 21 and Plates 33, 34), (3) rugged Miocene limestones in the neighbourhood of Corte, and (4) patches of recent alluvium at the heads of the gulfs on the west coast.

The main structural lines of Hercynian age, marked by faults and zones of weakness, run in a north-east to south-west direction (Fig. 4), and as a result there is a pronounced ridge and valley structure which has been emphasized by erosion.

The present-day details of the relief are due (*a*) to the agency of weathering, (*b*) to the action of contemporary rivers, and to a less extent (*c*) to the action of the Quaternary glaciers on the igneous rocks which are of varying degrees of resistance.

(*a*) *Weathering.* Weathering is an especially potent agent because of the great seasonal climatic changes in the mountainous areas. During winter sudden alterations of temperature above and below freezing-point often cause rocks to split. Snowfall is heavy but nowhere permanent, so that there is no constant blanketing of the relief, and the spring thaw produces a concentrated run-off. In summer disintegration is furthered by the diurnal changes of temperature which cause differential expansion and contraction, resulting in the splitting of the rocks.

A large part of the area consists of granite; its resistance to weathering, however, varies considerably. The commonest variety is a hornblende granite which weathers rapidly. Its relief is characterized by soft rounded plateaux of small extent, whose lower slopes are covered with boulders of all sizes. In detail, however, this granite does not always weather into smooth landforms. In many parts, notably in the massif of Agriates (Fig. 14), cavities known as *tafoni* are hollowed out and the surface becomes almost sponge-like.

Much more striking features of relief are formed by masses of biotite granite, known to the French geologists as 'granulite', a convenient term which is used here. Equally resistant are the masses of rhyolite, formed by the solidification of extrusive masses of acid lavas. The largest extent of the latter rocks in the north-west of the island is due to volcanic activity in Carboniferous and Permian times. Not only are the rhyolites and 'granulites' extremely resistant but they frequently have vertical planes of fracture. They form therefore most of the high ridge lines, or *crêtes*, and all the main summits (Fig. 6); the steep mountains with pinnacled ridges, such as, for example, the Capo alla Vetta (Plate 3), together with precipitous cliffs like those at the head of the Asco valley (Plate 4), are in striking

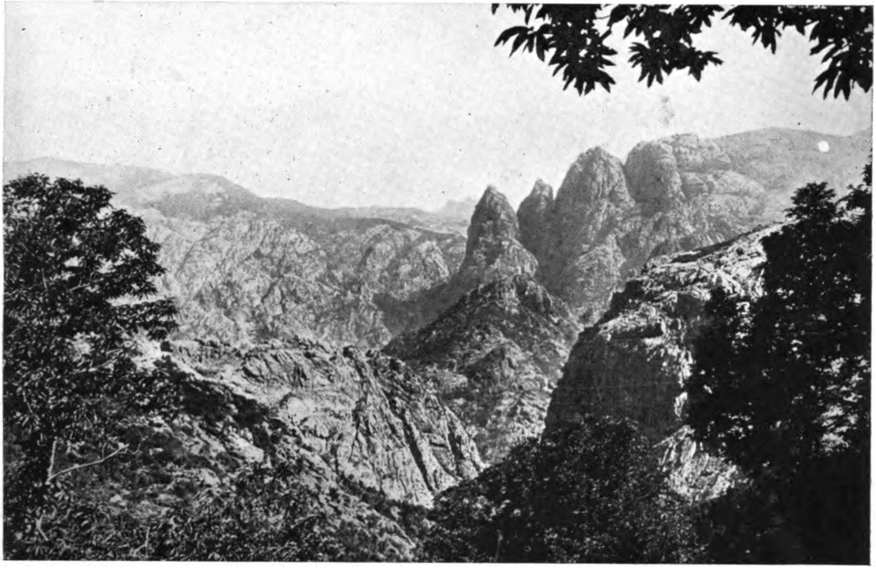


Plate 3. Capo alla Vetta (near Evisa)

Bare granite mountains rise steeply from the deep gorges of the rivers Porto and Longa; the highest point of the ridge of Capo alla Vetta (in the right background) is 1,283 m.

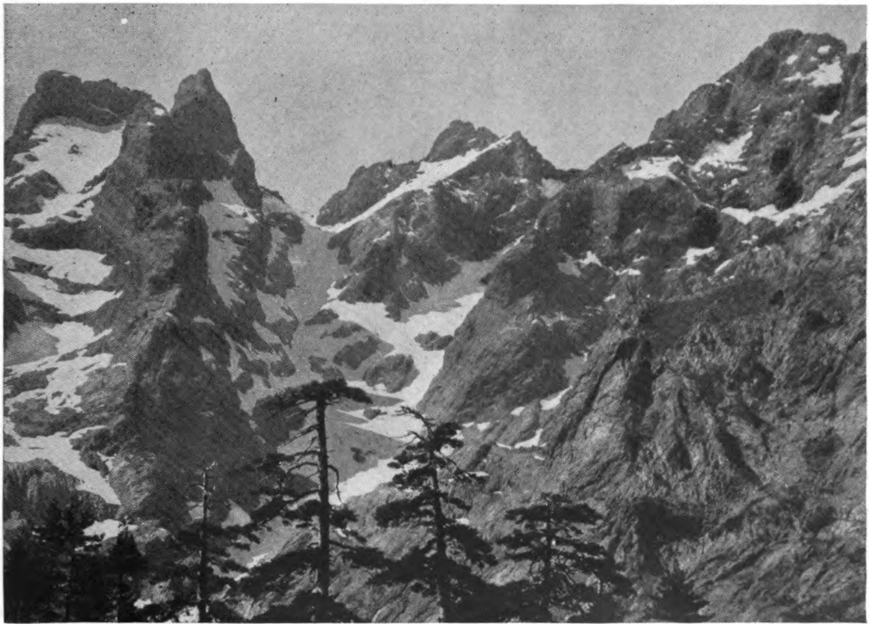


Plate 4. Peaks above the Asco valley

Capo Larghia (2,525 m.), Capo Rosso and Punta Minuta (2,547 m.) (from left to right) are prominent peaks on the high mountain rim which encloses the upper Asco valley. The snow, still lying in large hollows (in mid-May), disappears completely during the late summer, except in the deep sunless hollow of the Kessel von Trinbolaccia in the foreground (see p. 65).

Plate 5. Mt d'Oro

The rocky summit (2,302 m.), viewed across the Col de Vizzavone.

Plate 6. Mt Cinto and Capo al Ciuntrone

This photo. was taken in mid-April, looking north-west from Capo al Mangano across the basin of the upper Erco, a headstream of the Golo. On the left is Mt Cinto (2,710 m.), the highest peak in the island. The ridge continues north-east to Capo al Ciuntrone (2,670 m.).

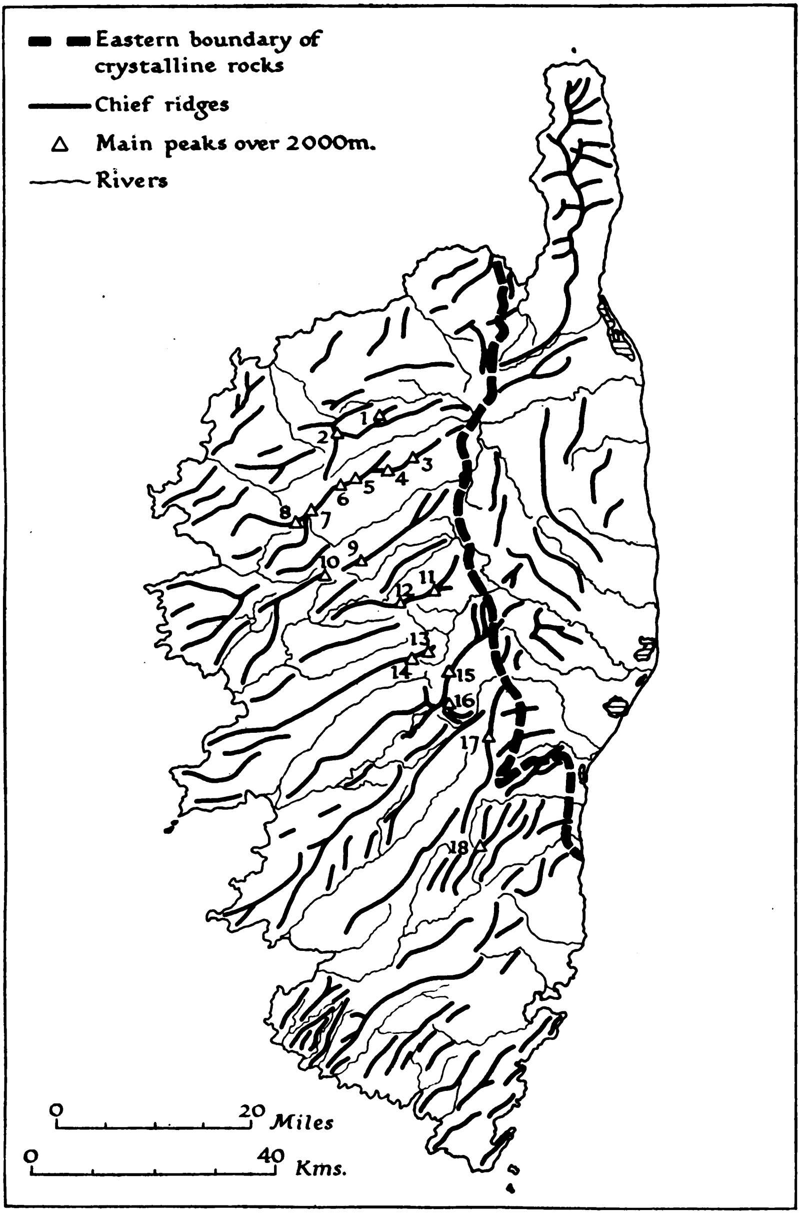


Fig. 4. Generalized map of the main ridges, peaks and valleys

The peaks are numbered to correspond to the table of names and altitudes on p. 14. Only the main peak is marked where there is a group of closely associated summits. Based on (1) 1:500,000 G.S.G.S. No. 4240 (London, 1941); (2) 1:500,000 *Carte géologique*, Sheet XII S.E. (Paris, n.d.).

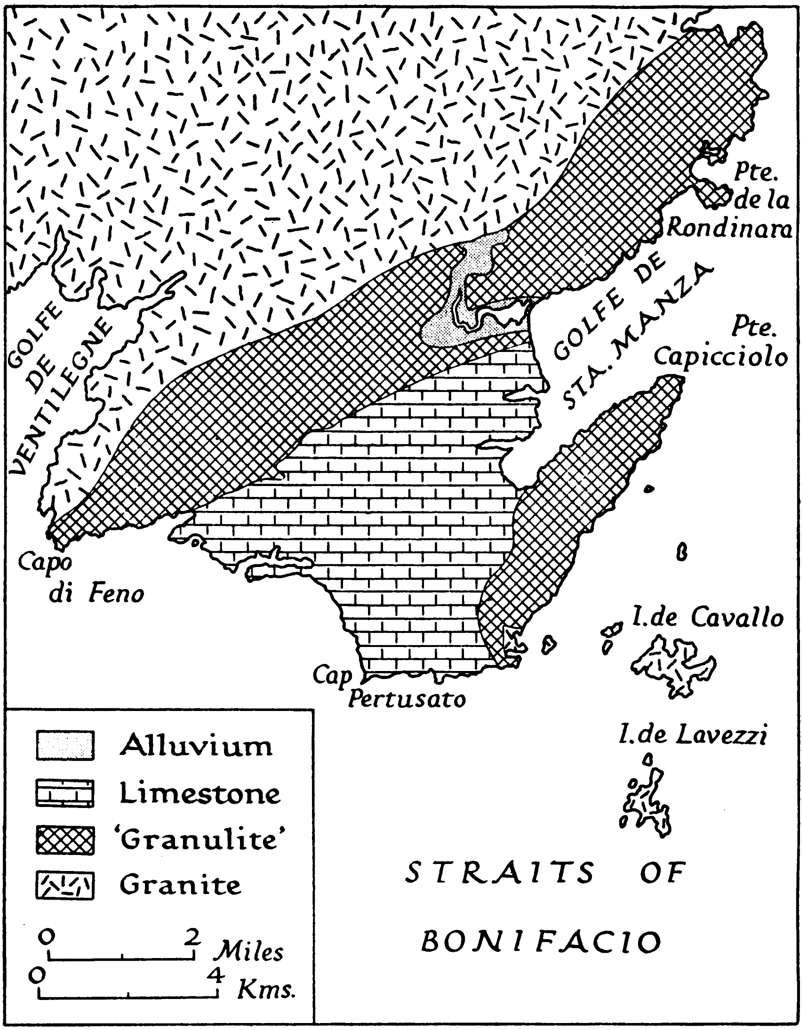


Fig. 5. The south coast

The Golfe de Sta Manza has been formed by the erosion of limestones lying between ridges of harder 'granulite'.

Based on (1) J. Déprat, 'Du Relief de la Corse', in *Revue de Géographie Annuelle*, vol. II, p. 13 (Paris, 1908); (2) 1:500,000 *Carte géologique*, Sheet XII S.E. (Paris, n.d.); (3) 1:100,000 *Carte de la France*, Sheet XXX 43 (Paris, 1892).

contrast to the more rounded relief of the hornblende granites. Frequently a local granite mass has been riven by weathering into a labyrinth of vertical pinnacles. A striking example is that of the Calanques de Piana (Plates 24, 64), a rugged mass of grotesque red rocks near the Golfe de Porto. Further variety in the relief is produced by local outcrops of other crystalline rocks such as gabbro, serpentine and diorites, which form rugged cliffs and peaks furrowed with dry ravines. Irregular minor eminences are formed by the erosion of breccias of volcanic origin. Isolated dykes, resistant to erosion, often form regular walls a few metres high; they sometimes run for several kilometres. Gneiss and mica schists tend to form local slopes of flat slabs.

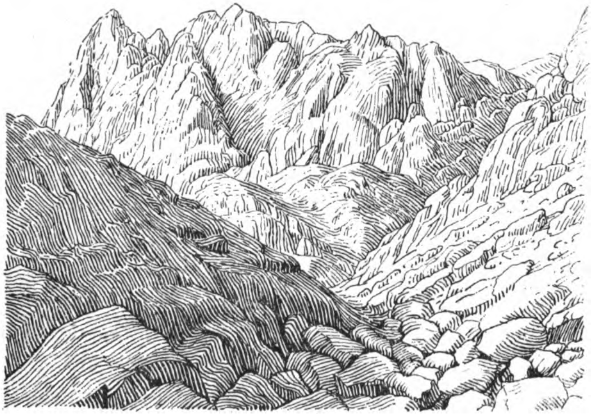


Fig. 6. The mountains above Ota (drawn from a photograph)

The village of Ota is situated in the Porto valley, on the road from the coast to Evisa. The bare, rugged mountains which dominate the valley (the highest point in the drawing is the Capo d'Ota, 1,220 m.) are typical of western Corsica (see also Plates 2–10).

(*b*) *The action of Rivers.* The rivers of Corsica are described below (see pp. 18–22 and Fig. 12), but in general it may be said that the streams which drain western Corsica, flowing either to the east or west coasts, follow and have accentuated the north-east to south-west valley and ridge structure (Fig. 4). The rapid run-off and steep gradients, together with past uplifts which have inaugurated new cycles of erosion, have resulted in deep valleys separating the ridges. In places rivers have cut deep gorges (Fig. 49, Plate 3), especially where the 'granulitic' rocks form bars across the softer granitic valleys; gorges also occur in this granite where the rock has been strongly fractured. A notable example of the former is the defile of Ste Reine in the Golo valley. Rivers flowing to the west coast are separated from the upper courses of those flowing to the east coast by cols. Thus the main watershed between west and east (Fig. 12) is almost at right angles to the ridges, and consists of passes alternating with groups of peaks on each successive ridge. The large number of torrents which join the main streams at right angles furrow the side of the ridges. The material carried by the torrents is deposited as fans. Finer sediment is deposited either in the lower parts of larger rivers in banks, or at the heads of the gulfs (see p. 38 and Plates 25, 32).

(*c*) *The Quaternary Glaciation.* Corsica is much farther south and much lower than the main Alpine ranges and has no permanent snowfields or glaciers. Neither its height nor its area was sufficient to produce glaciers during the Quaternary era in any way comparable with those which so profoundly modified the relief of mountainous areas of central and northern Europe. But it is evident that in the Quaternary Ice Age there were a number of small glaciers in the higher massifs, and that their oscillations were the same as the main stages in the Alps. From small permanent snowfields short ice lobes extended for 2 or 3 km. down the high valleys, eroding characteristic U-shaped cross-sections. The valleys of the Restonica and Tavignano in the Rotondo district, of the Prunelli in the Renoso district, and of the Stranciacone and Erco in the Cinto district exhibit this U profile in their upper sections. Their heads are great amphitheatres, surrounded by rocky peaks. Cirques frequently show a fine state of development; they are separated by steep *arêtes*, and numerous small lakes lie in the rock basins. Notable examples are the two large cirques of Melo and Renoso in the Rotondo range, while Mt Renoso has been cut into on both sides by cirques. Other common glacial phenomena include hanging tributary valleys, valley steps and striated surfaces. Glacial deposits are of small extent; large moraines are found only exceptionally. This is probably due to the heavy floods in post-glacial times, which removed much of the accumulated glacial debris.

Glaciation was clearly of very limited extent and has played only a subsidiary part in the evolution of the present relief of the island; it has merely accentuated the steep rugged character of the high central massifs.

Summary of the Relief of Western Corsica. Thus in detail the variety of relief is the result of the sculpturing of igneous rocks of

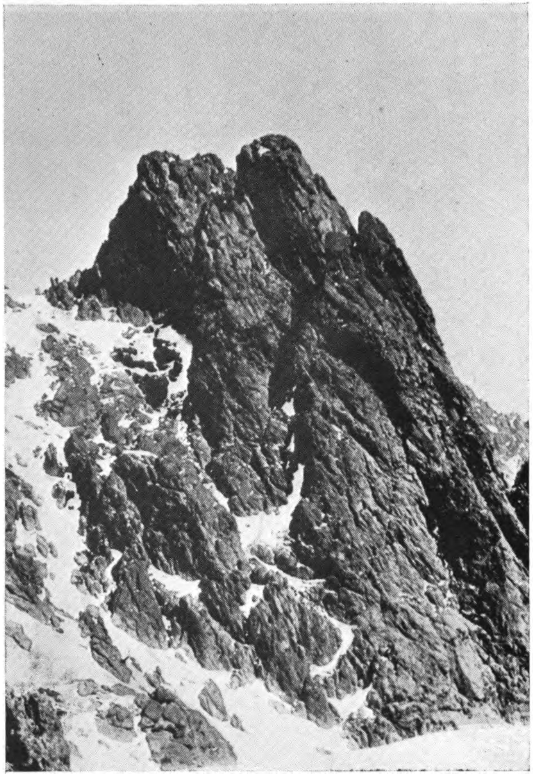


Plate 7. Capo al Dente

The eastern face of this peak, seen from the Col de Tartagine (1,857 m.), rises precipitously to a height of 2,032 m. from the Tartagine valley. The rock face visible in the photograph is about 500 m. high.

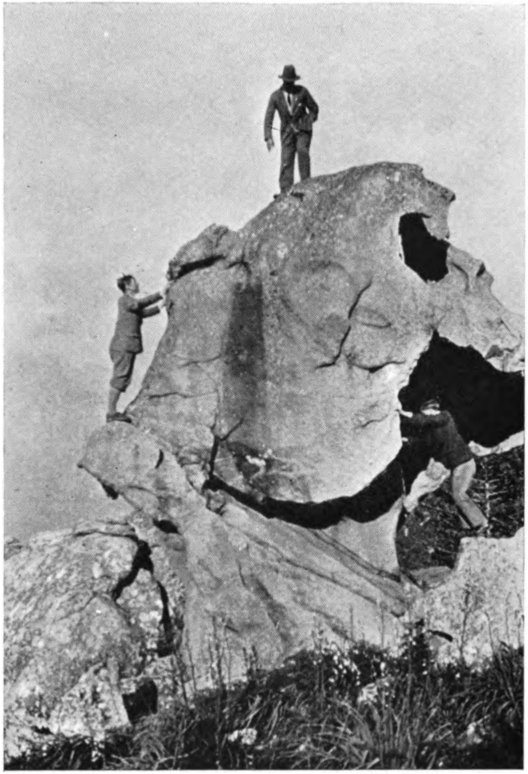


Plate 8. A weathered granite boulder near Piana

Numerous granite boulders in western Corsica are hollowed out by the action of the weather, leaving only a hard red shell.

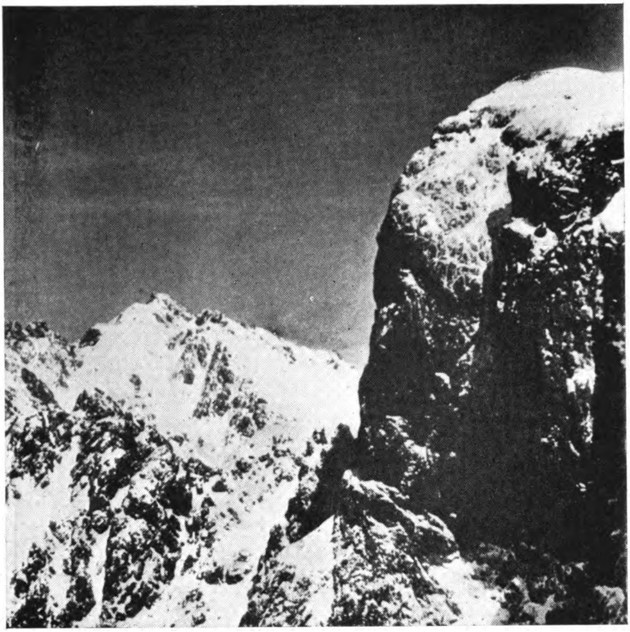


Plate 9. Paglia Orba

This peak in the foreground, rising to a height of 2,523 m., is probably the most impressive of all Corsican mountains (see also Plate 39). Its north wall, rising from the Kessel von Tondo at the head of the Vecchia valley, culminates in a precipice. The upper cliff seen in the photograph is 300 m. high. In the background is Capo Uccello (2,295 m.).

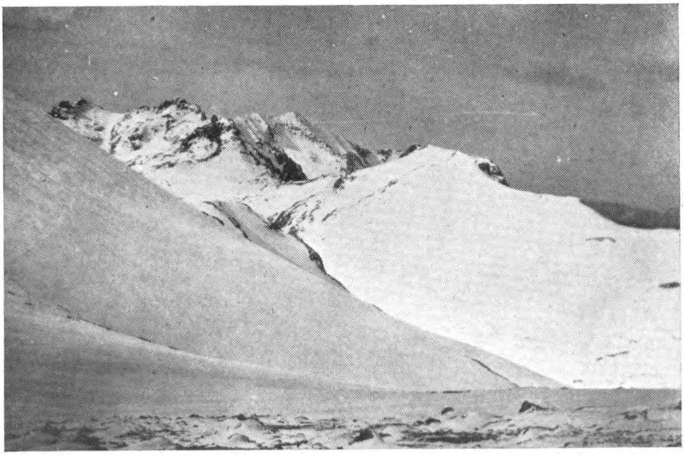


Plate 10. Peaks and passes at the head of the Golo valley

The photograph, taken in early March looking south, shows the extensive winter snow-cover on gentler slopes. In the foreground is the Col de Foggiale (1,965 m.), while in the background is the Col de Guagnerolo (1,837 m.), two of the numerous high passes crossable only on foot or with a mule in summer.

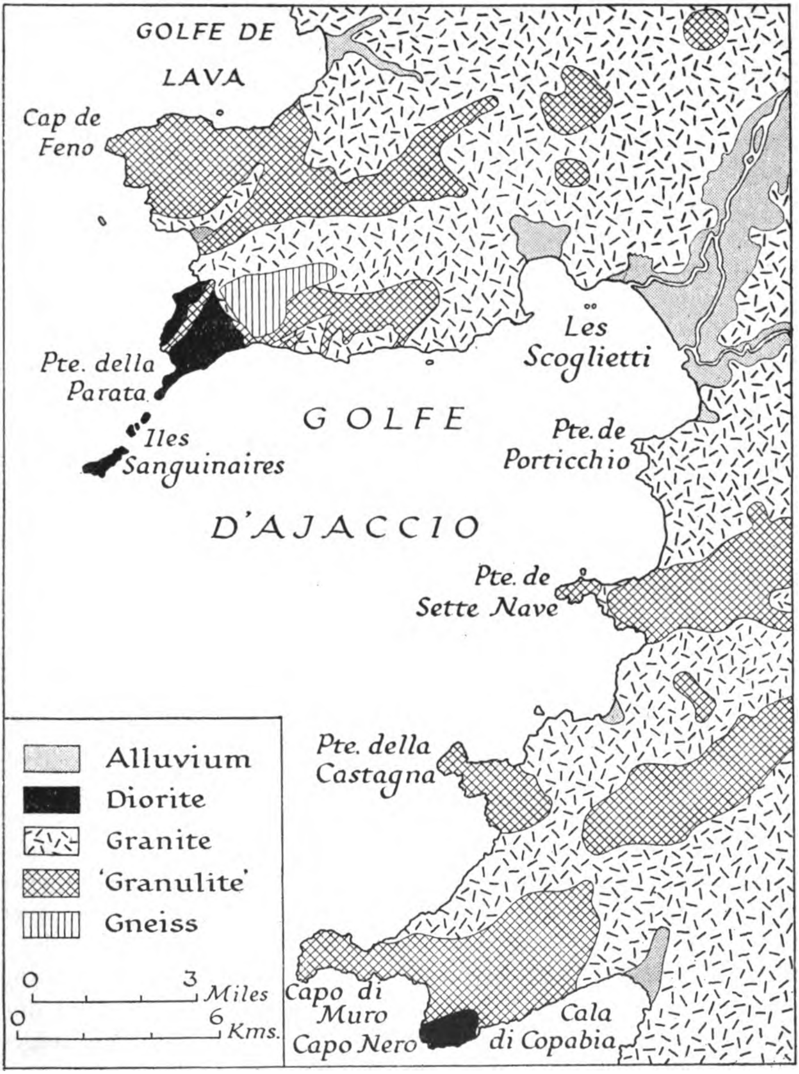


Fig. 7. The coastline of the Golfe d'Ajaccio

A typical part of the indented west coast, illustrating the effects of differential marine erosion. The prominent headlands are formed either of resistant 'granulite' or of diorite.

Based on 1:80,000 *Carte géologique*, Sheet 264 (Paris, 1873).

varying degrees of hardness. The 'grain' of the country is markedly from north-east to south-west; fractures produced lines of weakness which have facilitated the erosion of valleys and accentuated the jagged crests of the ridges. These ridges end in rugged promontories and strings of rocky islets (Fig. 7, Plates 24, 29, 30). The valley floors are seldom flat; those which are as much as 5 km. broad are undulating granitic hill regions, and are valleys only in contrast to the abrupt ridges which separate them; some are cut through 'granulite' and form steep-sided gorges. The ridges are generally over 1,000 m.; where the main watershed between east and west intersects the ridges almost at right angles, jagged peaks of resistant rock rise to more than 2,000 m. The groups of peaks may be seen from Fig. 4, on which the major summits of each locality are numbered from north to south to correspond to the following list:

	m.		m.
1. Mt Padro	2,393	10. Punte Artica	2,329
2. Mt Corona	2,143	11. Mt Cardo	2,454
3. Mt Traunato	2,180	12. Mt Rotondo	2,625
4. Capo Bianco	2,554	13. Mt d'Oro	2,302
5. Mt Cinto	2,710	14. Punte Migliarello	2,258
6. Punta Minuta	2,547	15. Punte dell' Oriente	2,109
7. Paglia Orba	2,523	16. Mt Renoso	2,357
8. Capo Tafonato	2,343	17. Punta della Capella	2,043
9. Mt Tozzo	2,099	18. Mt l'Incudine	2,136

NORTH-EASTERN CORSICA

East of the igneous massif is a region of folded metamorphic rocks, chiefly *schistes lustrés*, with several large masses of intrusive rocks, notably gabbro, serpentine and peridotite. An anticlinal fold forms the 'backbone' of Cap Corse. Where the granitic and schistose rocks come into contact, the ridges are irregular, but they appear generally to run in a north-east to south-west direction. The river Golo between Ponte-Leccia and Casamozza cuts a deep valley which forms a complete break across the folds. The general trend of the ridges south of the river is north-west to south-east, a trend due partly to folding, partly to faulting. The parallelism of these ridges is by no means as pronounced in this region as in the western part of the island. The general altitude is much less, as in the Cap Corse peninsula the highest peak is Mt Stello (1,305 m.) and in the district between the Golo and the Tavignano the highest is Mt San Pietro (1,766 m.) (Plate 12).

The relief of this eastern part of the island is much less rugged, due largely to the homogeneity of the schists; hills are generally dome-shaped (Figs. 8, 11). The steepest slopes in the *Chataigneraie* (see p. 23 and Fig. 14) are near the bottoms of valleys, which show the north-west to south-east parallelism; between the deeply incised valleys are smoothly convex ridges. A contrast to the schistose landscape is provided by the basic rocks such as gabbro and peridotite, large masses of which have been exposed by denudation, and therefore rise up strongly as rugged summits from 1,000 to 1,500 m. above sea level. They occur along the western flanks of the Cap Corse peninsula, forming the resistant line of the crests (Fig. 9, Plate 11), and also in the west of the *Chataigneraie*. Minor constituents in the geological structure of north-east Corsica include outcrops of older Tertiary rocks such as sandstones, limestones and conglomerates in the Ostriconi valley south of the Golfe de St Florent, in the upper Tavignano valley and round Solaro. The limestones of these series have been extensively eroded and are the surviving remnants of much more extensive deposits; they form isolated 'buttes' with steep sides.

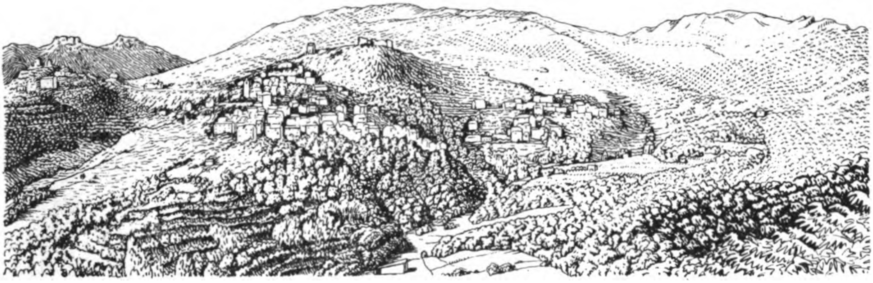


Fig. 8. Hills in the Cap Corse peninsula (drawn from a photograph)

Cap Corse consists mainly of rounded dome-shaped hills of *schistes lustrés* (see Fig. 9); occasionally these are capped by masses of intrusive rock which have been exposed by denudation, as on the left of the picture. See also Plate 11.

EAST COAST PLAIN

While this plain is most conveniently described in detail in the coastal section (see pp. 46–8), its main physical features may be described here briefly for completeness. It stretches from Bastia to Solenzara, a distance of about 100 km., and varies in width from 15 km. in the plain of Aléria to less than 1 km. where the hills of the *Chataigneraie* approach close to the sea. It is made up of sediments which have filled pre-existing basins and have very slowly extended the coast eastwards into deep water. It is, in fact, a coast composed of a fusion of deltas. The plain is undulating, with low hills of older alluvium rising in places to 40–50 m., and is crossed by numerous meandering rivers separated by low ridges of alluvium. The sediments

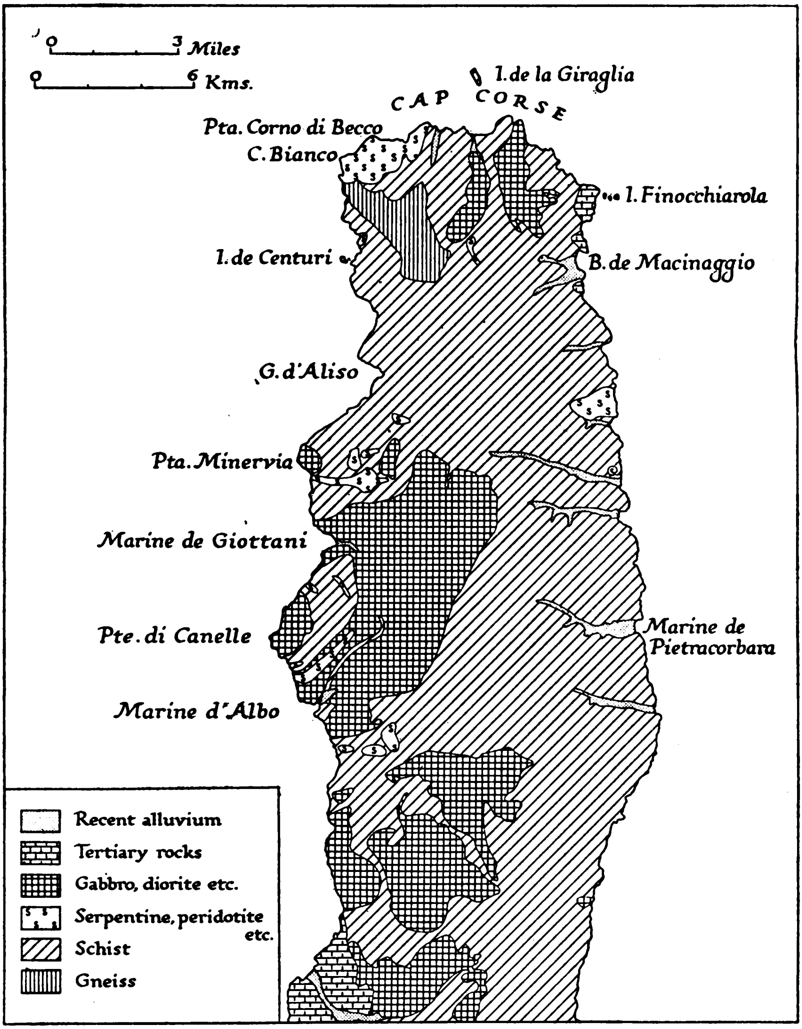


Fig. 9. The geological structure of Cap Corse
Based on 1:80,000 *Carte géologique*, Sheets 259, 261 (Paris, 1901).

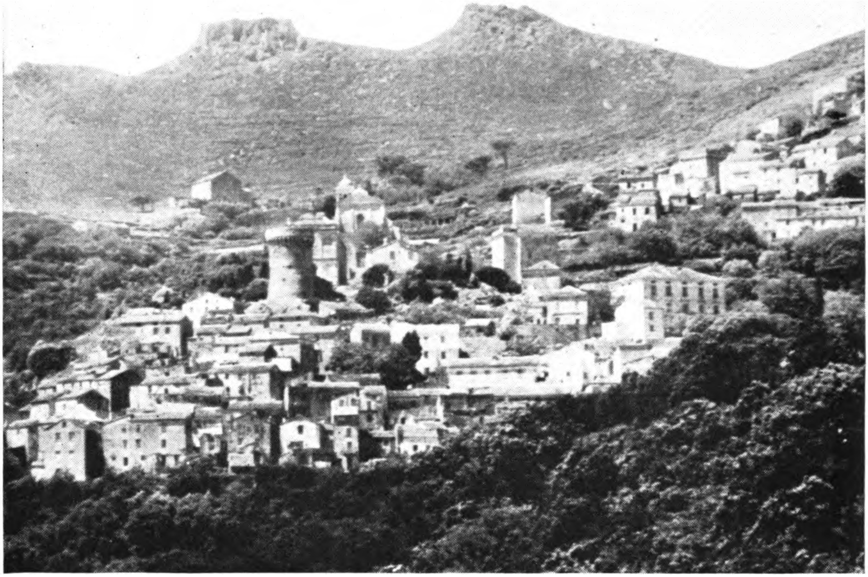


Plate 11. Hills in the Cap Corse peninsula above Rogliano

The smooth schistose hills of Cap Corse are in many cases capped by rugged masses of gabbro (see also Fig. 8).

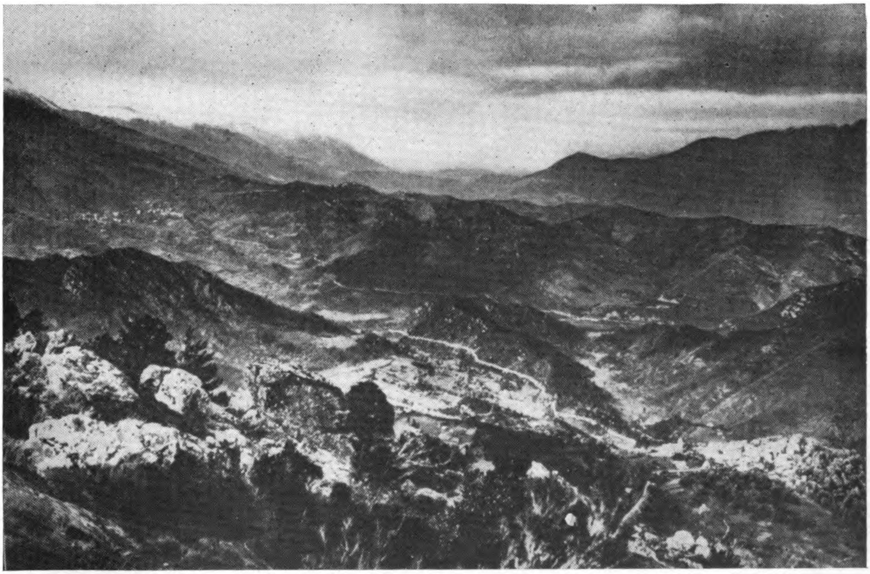


Plate 12. The interior of Corsica, near Noceta

The village of Noceta (right foreground) is situated in the 'Central Furrow' about 20 km. south-east of Corte. On the left rises the snow-covered massif of Mt Rotondo (2,625 m.), while on the right are the lower and more regular ridges (with summits about 1500 m high) of the north-eastern uplands.

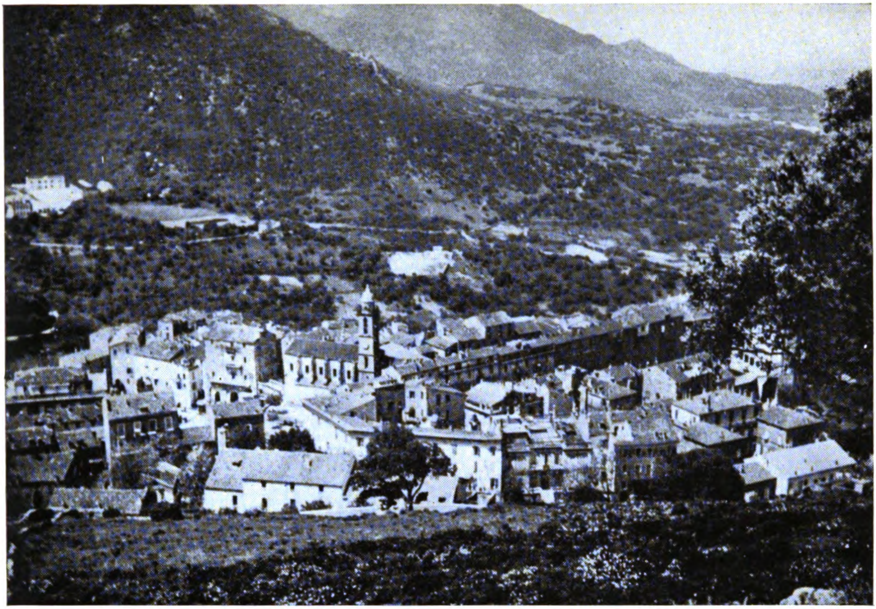


Plate 13. Wooded valleys of the south-west, near Sartène

Looking north from the hillside above Sartène across the wooded, gently undulating valley of a tributary of the river Rizzanèse.

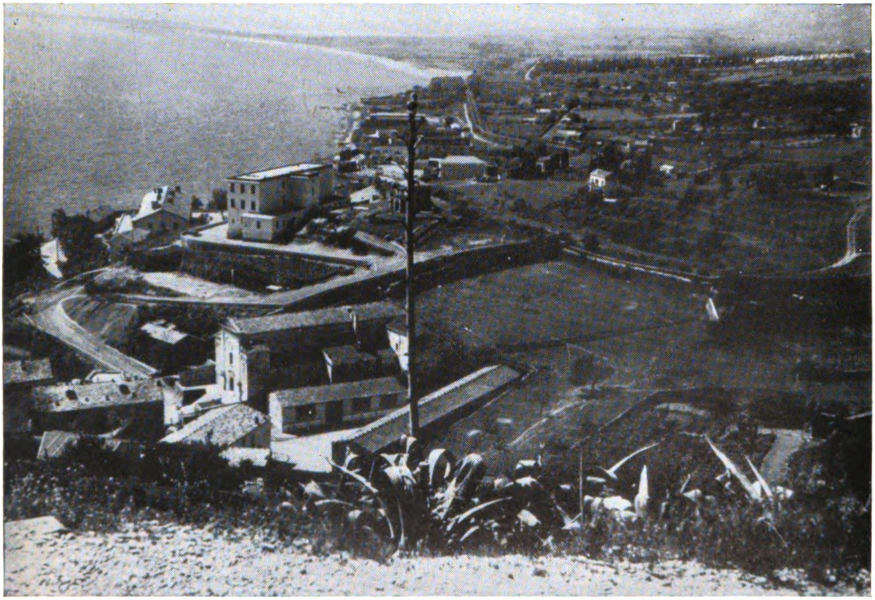


Plate 14. Part of the east coast plain

Looking south from the *citadelle* at Bastia. In the distance is the Étang de Biguglia.

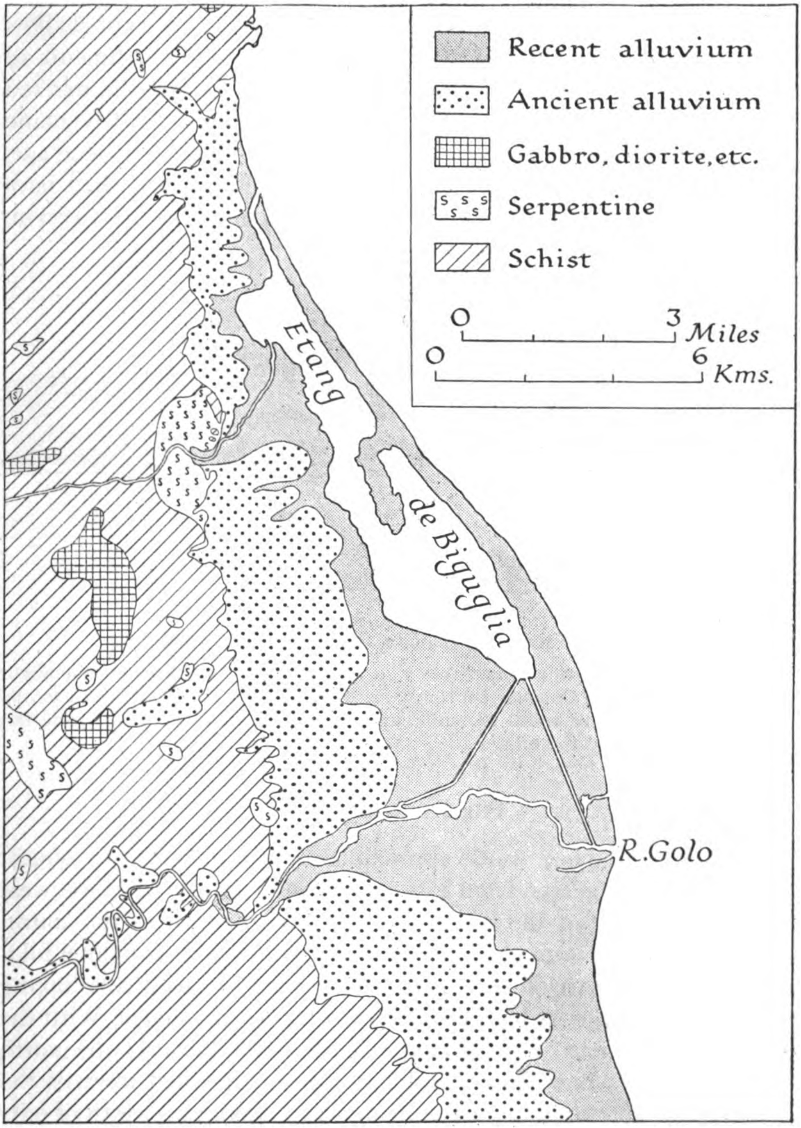


Fig. 10. The east coast near the Golo delta
Based on 1:80,000 *Carte géologique*, Sheet 261 (Paris, 1901).

near the coast consist of recent deposits of sand, mud and shingle; much of the area is marshy and there are numerous sheets of shallow water (*étangs*) (Figs. 10, 11). Farther inland are older sediments of more consolidated sands and gravels which rest against the marked step at the edge of the uplands. In the area between the Tavignano and Alesani rivers are older deposits of Miocene and Pliocene age, consisting of sandstones, limestones and conglomerates; they have been cut up by the numerous small rivers into hills from 50 to 70 m. high.

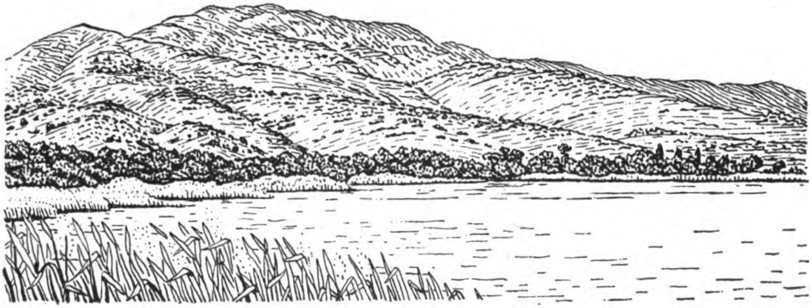


Fig. 11. The Étang de Biguglia (drawn from a photograph)

This large sheet of brackish water (see Fig. 10 and p. 48) covers an area of about 1,800 ha. The eastern uplands approach its shores in the north as shown in the illustration, but farther south an undulating alluvial plain some 6 km. wide lies between the *étang* and the hills.

THE RIVER SYSTEM

The main watershed runs approximately from north to south, although as can be seen from Fig. 12 it swings well towards the west in the north part of the island and towards the east in the south. In Cap Corse this watershed corresponds mainly to an anticlinal fold, but in the main part of the island it is formed by steep cols linking together the groups of high peaks on the transverse ridges. With the exception of a few short streams which drain towards the north coast, the rivers flow from this longitudinal watershed towards the east and the west coasts. As the island has a maximum width of only 83 km., rivers are short. The only rivers of any length are the Golo (Plate 67) and the Tavignano (Plate 68) (approximately 90 and 80 km. respectively) which flow to the east coast; and the Taravo and Gravone (each approximately 60 km.) which flow to the west. The majority, however, are about 20 or 30 km. in length.

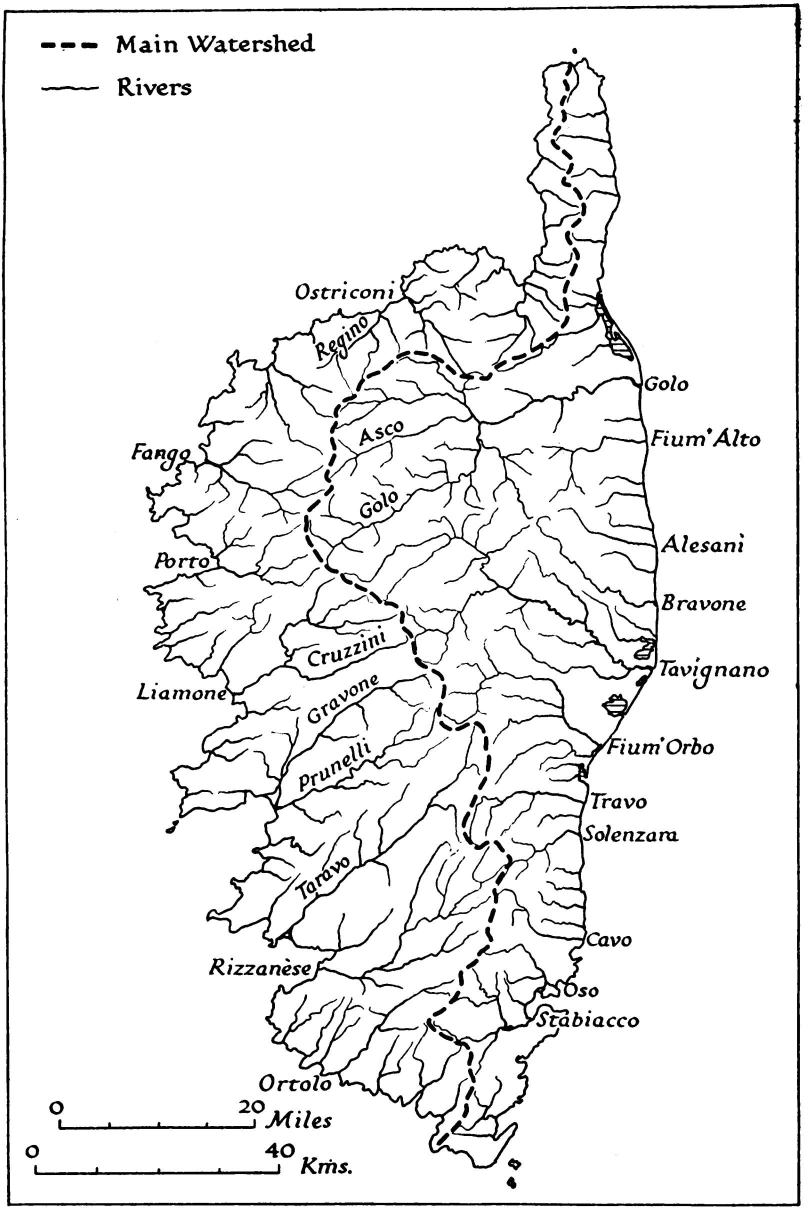


Fig. 12. The river system

Based on 1 : 500,000 G.S.G.S. No. 4240 (London, 1941).

The headstreams of the longer rivers rise at altitudes of from 1,500 to 2,500 m. Thus the descent to the coast is rapid, and many streams are torrential (Plates 2, 68). Frequent movements of uplift have caused them to incise deep valleys.

The Regime of Corsican Rivers

The seasonal flow of rivers is affected (1) by the distribution of rainfall and snowfall, (2) by natural storage such as in lakes, marshes and snowfields, and (3) by the nature of the surface, that is, the degree of permeability and porosity of the rocks, the gradient of the slopes, and the type of vegetation. The shorter Corsican rivers reflect the marked contrast between the dry summers and rainy winters of the Mediterranean climate. The short-lived but heavy rains of autumn and winter, falling on steep bare slopes, produce a concentrated run-off which turns these streams into unfordable torrents. In summer they degenerate into a mere string of pools as a result of the drought and of the rapid evaporation; the Gravone, for example, cannot always supply the Ajaccio reservoir with water in the summer months. The long eastern rivers drain the central mountains on which there is a heavy snowfall; in addition to the autumn and winter maximum due to the increased rainfall, there is a second maximum in May and June due to melting snow. The eastern rivers show the same marked summer minimum, especially in the coastal plain, where they become mere trickles of water among banks of sand and shingle.

Rivers of the West Coast

In western Corsica the ridges and valleys are clearly defined; the Liamone, Gravone, Prunelli, Taravo and Ortolo rise in rugged basins dominated by the high massifs, and flow in almost parallel valleys separated by lines of steep rocky ridges. Main tributaries are few; they share this parallelism and join the main streams at a very acute angle. Most tributaries, however, are merely short torrents which cascade down the sides of the ridges, joining the main streams almost at right angles. The 'capture' of a stream by another in a neighbouring valley is infrequent, as the separating ridges are too high to be notched and finally to be cut through by active tributaries. Thus there is no single master stream draining an extensive area of country, but a large number of independent rivers flowing directly to the coast in relatively straight valleys. The Liamone, with its parallel tributary the Cruzzini, is perhaps the only exception, as both make sharp right-angled bends through gaps in the ridges before they unite (see Fig. 13).

Rivers of the North and North-west Coast

North of the Golfe de Porto the ridges do not reveal so markedly the north-east to south-west trend and are not so continuous. The main streams, notably the Fango, the Ficarella and the Secco, zigzag in a north or north-west direction across the general grain of the country. The Ostriconi, which flows in a north-north-west direction, occupies the most northerly part of the 'Central Furrow' (see p. 6). It is possible that the former headwaters of the Ostriconi were captured by the larger Golo.

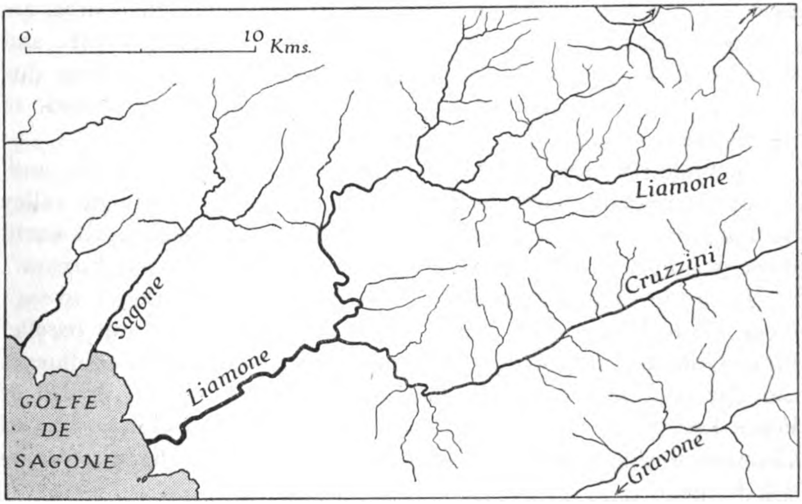


Fig. 13. The basin of the river Liamone

It is considered probable that at one time what is now the upper Liamone flowed to the sea through the valley of the present river Sagone. An active headstream of the Cruzzini cut back its watershed and finally 'captured' the upper Liamone. The original lower course of the Liamone now forms the much smaller river Sagone.

Based on 1 : 100,000 *Carte de France*, Sheets 40, XXIX (Paris, 1893) and 40, XXX (Paris, 1934).

Rivers of Cap Corse

Short torrential streams with numerous affluents drain the basins on each side of the axial ridge of Cap Corse. The longest is the Luri (about 5 km.), which flows to the east coast; the watershed at this point curves to within 2 km. of the west coast.

Rivers of the East Coast

In the upland area of eastern Corsica the general trend of the folded ranges is approximately north-west to south-east. As a result, shorter rivers such as the Alesani, Bravone and Tagnone flow in a general south-east direction to the sea. There is a secondary watershed between the coastal rivers and those flowing away from the sea towards the 'Central Furrow'. The Casaluna, for example, rises less than 500 m. from the Bravone; both flow in valleys orientated north-west to south-east, but in opposite directions, the former to join the Golo in the 'Central Furrow', the latter to the sea. The courses of the longer rivers, notably the Golo, Tavignano, and Fium' Orbo, show three clearly marked divisions. Their upper courses from south-west to north-east are in the igneous massif, their middle courses are in the 'Central Furrow', approximately from south to north, and their lower courses (with the exception of the Golo which flows due east) exhibit the north-west to south-east direction characteristic of the shorter east coast rivers.

The Golo rises under the Col de Vergio in a great cul-de-sac, and, fed by innumerable torrents, flows north-east in a long straight valley bounded by 'granulitic' *crêtes*. At Francardo it turns abruptly north through gorges into the middle section along the 'Central Furrow', receiving the Vignolo from the south along the line of the 'Furrow'. Near Ponte-Leccia it is joined by the Asco, which flows parallel to the Golo in a steep-sided valley; the lower Asco and its confluents the Tartagine and Navaccia flow south in the 'Furrow'. North of Ponte-Leccia the Golo turns abruptly east and flows for 20 km. to Casamozza in a narrow steep-sided valley, thence to the sea over its deltaic plain.

The Tavignano and its head stream the Restonica also flow north-east along deep valleys between the crystalline crests, and after passing through deeply incised gorges unite at Corte. The main river then turns sharply south-east, and after receiving the Vecchio, which drains the Mt d'Oro massif, flows for 40 km. to the sea. The central section is less clearly marked; the line of the 'Central Furrow' is indicated by short tributaries joining the main river from the north near Corte.

South of Solenzara the igneous massif reaches the east coast. The short rivers therefore flow directly in a north-east or east direction towards the sea.

REGIONAL DIVISIONS (Fig. 14)

A number of divisions can be distinguished based more or less on the physical geography. They have local or popular names which do not correspond to any present political and administrative divisions, although sometimes they may have done so in the past. In this respect they resemble the French *pays*; indeed, two of them are actually called *pays*, or *paese* in the Corsican dialect (the *Pays de Sevi* and the *Pays de Sartène et d'Ortolo*). Most of the names have been given to their respective localities by the inhabitants who, consciously or unconsciously, seem to have recognized certain unities based upon the natural facts of soil and relief. Some of them comprise clearly cut physical divisions, such as valleys separated by ranges of hills; frequently in the past the more inaccessible regions have been able to maintain independence while the rest of the island was under foreign domination.

These local names facilitate detailed reference to the regional geography of Corsica, and as they are frequently used in the following chapters, they may be conveniently listed and defined. The following list is numbered to correspond to Fig. 14.

(1) *Cap Corse*, a clearly defined hilly peninsula.

(2) *Nebbio*, a region of upland valleys, the most important of which are those of the rivers Ostriconi, Aliso and Revinco.

(3) *Agriates*, a rugged almost uninhabited massif.

(4) *Balagne*, the low hills and valleys extending behind the north-west coast as far as the high ridges overlooking the Tartagine and Asco rivers to the south.

(5) *Guissani*, the high valleys of the rivers Tartagine and Asco, bounded by steep rugged ridges.

(6) *Niolo*, the valley of the upper Golo river.

(7) *Chataigneraie* (*Castagniccia*), a region of upland valleys and rounded hills between the rivers Golo, Casaluna and Tavignano, largely covered with chestnut woods.

(8) *Casinca*, the narrow coastal plain bordering the *Chataigneraie* on the east and including the wider plain of the Golo delta.

(9) *Piana d'Aléria*, the coastal plain in the neighbourhood of the Tavignano delta.

(10) *Fium' Orbo*, the mountainous and isolated region of the upper valleys of the Fium' Orbo, Abatesco and Travo, shut in between the high ranges of the centre of the island.

(11) *Pays de Sevi*, the region west of the Golfe de Porto, consisting

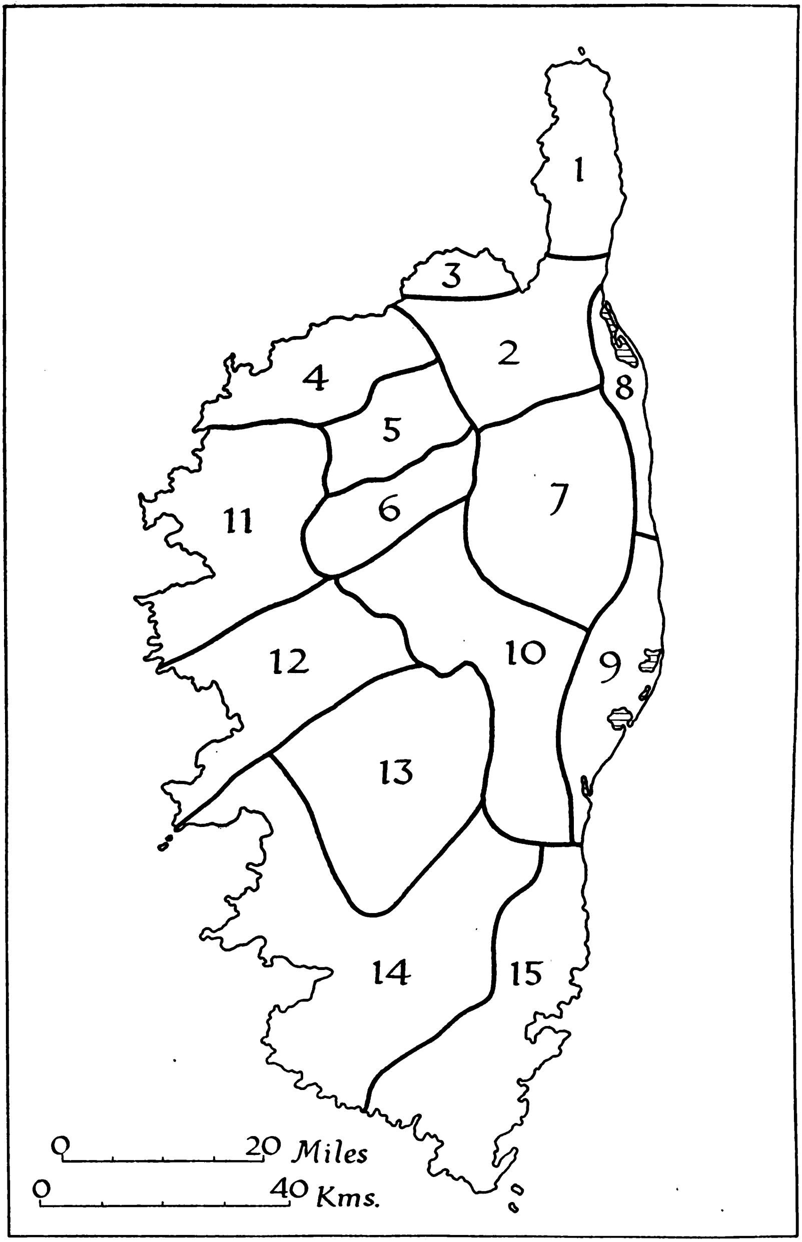


Fig. 14. Regional divisions

The figures refer to the numbered list on pp. 23, 25.

Based on *Enciclopedia Italiana*, vol. XI, p. 514 (Milan, 1931).

of wooded ranges of hills and valleys; the most important of the latter are the Porto and the upper Liamone.

(12) *Cinarca*, the region west of the Golfe de Sagone, consisting of the valleys of the Liscia and Liamone, with the latter's long tributary, the Cruzzini.

(13) *Ornano*, an upland area consisting of the deep valleys of the upper Prunelli and Taravo, separated by steep ridges.

(14) *Pays de Sartène et d'Ortolo*, the rugged south-western part of the island, with numerous long valleys and ridges.

(15) *Orbo-Alamana*, the south-eastern part of the island, consisting of a narrow coastal lowland and the usual alternation of ridges and valleys.

Chapter III

COASTS

General Features: Coast of Cap Corse: North-west Coast: West Coast: South-west Coast: South-east Coast: East Coast: Note on Lighthouses

GENERAL FEATURES

Corsica is separated from the French and Italian Riviera coasts by depths exceeding 2,000 m.; these depths are also attained within 30 km. of the west coast (Fig. 15). Off the east coast and parallel to it is a long narrow trough between 500 and 1,000 m. deep, which separates Corsica from the submarine plateau bordering the west coast of Italy; most of this is less than 200 m. deep, and upon it stand the Tuscan islands of Gorgona, Capraja, Elba, Pianosa and Montecristo. This submarine plateau approaches Corsica most nearly east of Cap Corse, from which the Ile di Capraja is only 25 km. distant. In the south the Straits of Bonifacio are barely 12 km. wide, and off both the Corsican and Sardinian coasts islands reduce the actual channel to about 5 km. in width; it is little more than 50 m. deep.

The west coast of Corsica, together with the coast of Cap Corse and of the extreme south-east, owes its characteristic features to two factors. The first is extensive subsidence in the past; for large areas foundered to form the Ligurian Sea, and Corsica and Sardinia are the major remnants. The subsidence allowed the sea to submerge the margins of an eroded upland area, where the ridges run approximately at right angles to the coast, and produced an alternation of headland and gulf. The second factor is the erosion by the waves of rocks of varying degrees of resistance. As a result, a large proportion is bounded by cliffs (Fig. 16).

Part of the east coast is characterized by a low plain of alluvium, built up by numerous streams; sheets of brackish water (*étangs*) and marshes occur immediately behind the dunes along the shore. The regular coastline contrasts markedly with the indented west coast.

Anchorages and landings. The majority of natural anchorages are situated near the heads of the gulfs, and owing to the indented nature of the coast are fairly numerous on the west. Most of these gulfs, however, open broadly to the sea, and are very exposed to on-shore

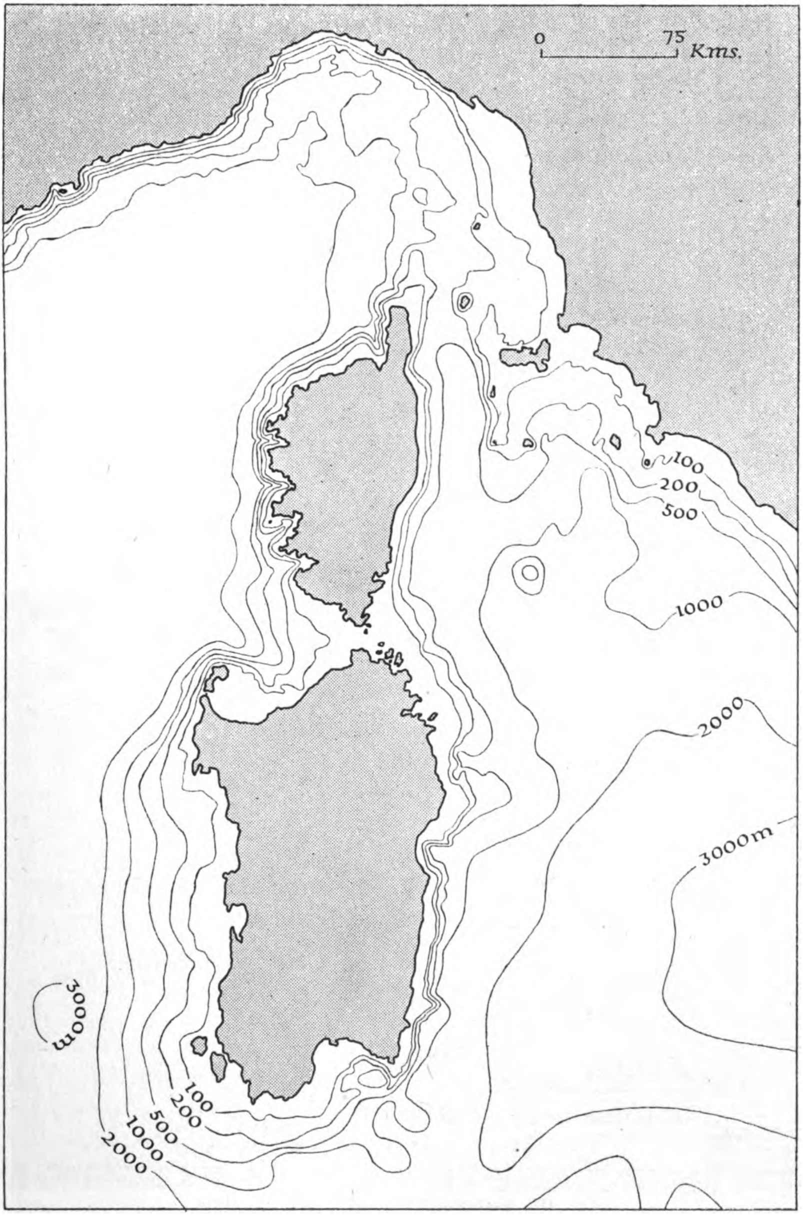


Fig. 15. Submarine contours in the vicinity of Corsica

Based on *Atlante Fisico Economico d'Italia*, Sheet 1, *Altimetria*, published by the 'Consociazone Turistica Italiana' (Milan, 1939).

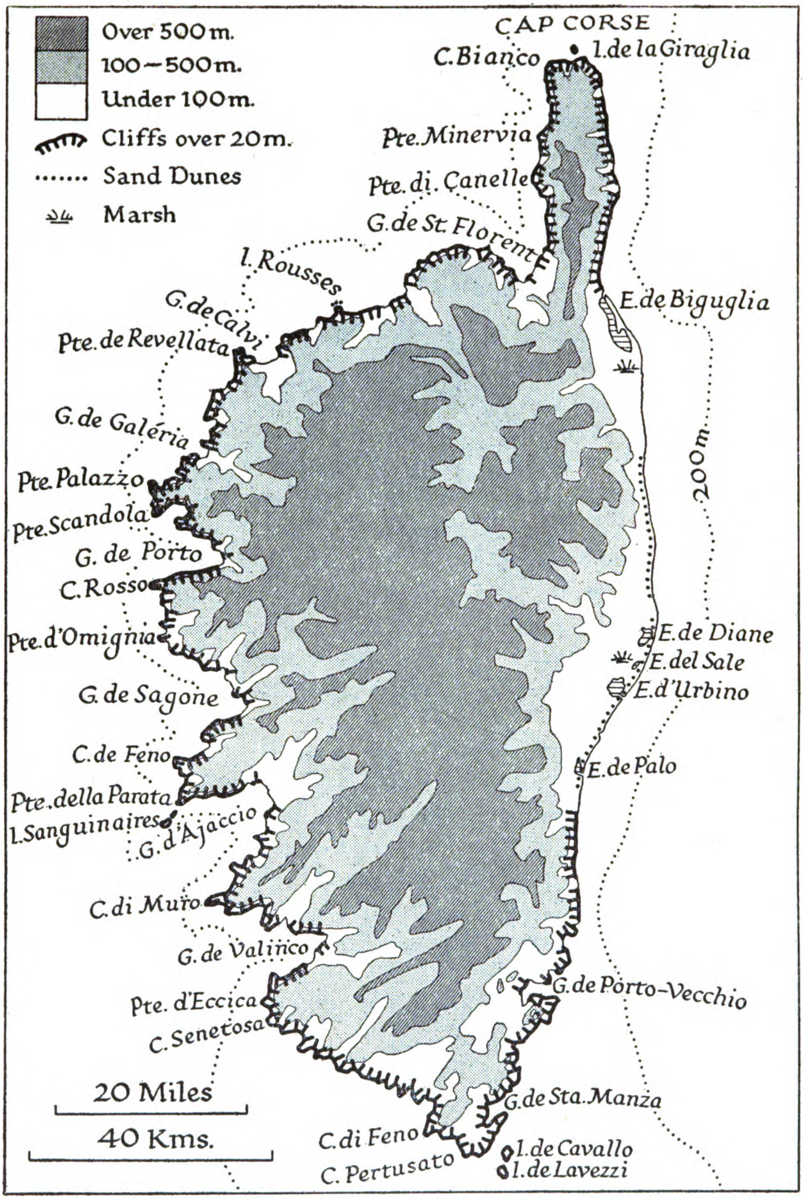
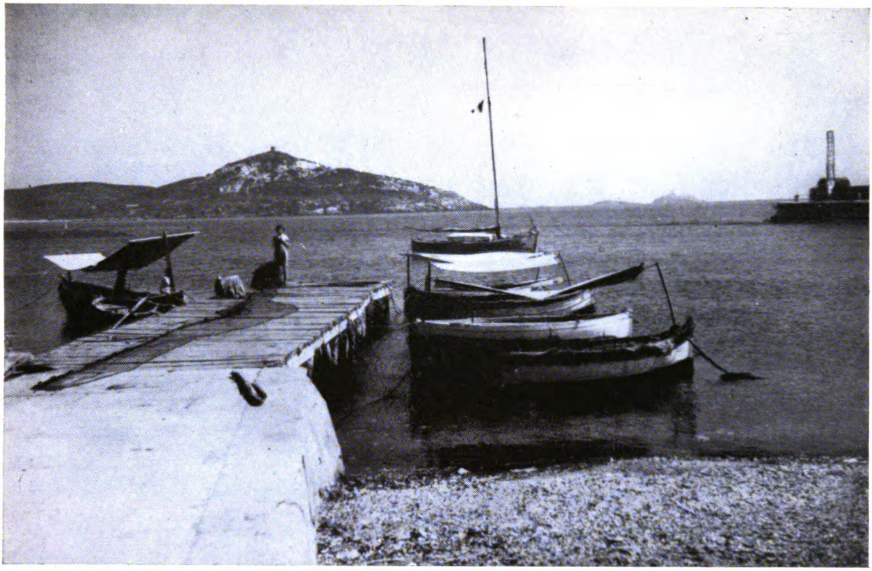
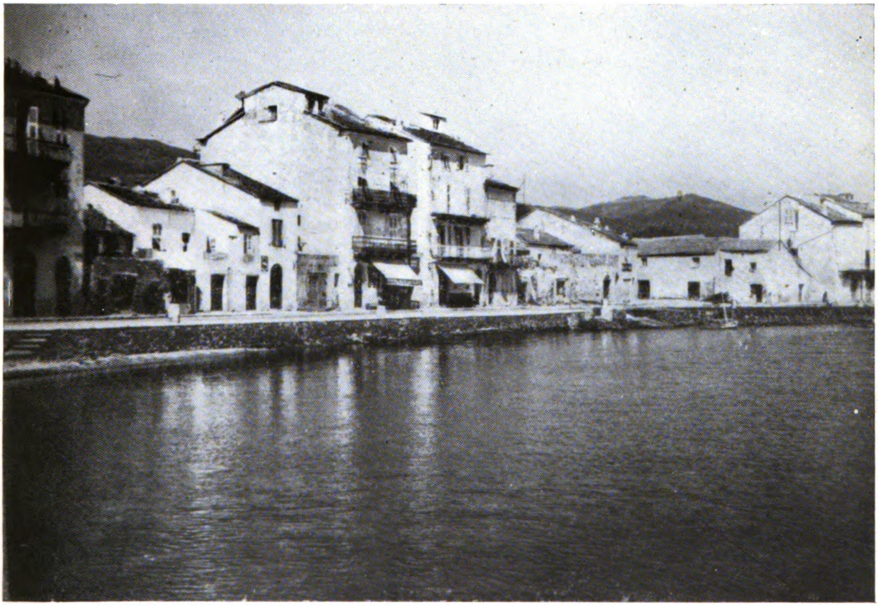


Fig. 16. Generalized map of the coastline
Based on the *Atlas de France*, Plate 24 (Paris, 1935).





Plates 15, 16. Baie de Macinaggio

The northern shore of the bay is formed by the Pte de la Coscia, on which stands a prominent mill. At the southern end of the bay is the small port, enclosed by two jetties; the southern one is visible on the right of Plate 15. Between the two jetties is the village and waterfront (Plate 16), and a pebbly beach with a small landing stage for fishing boats. In the distance are the Iles de Finocchiarola, on the largest of which is a conspicuous tower.

Plate 17. Cap Corse and the Ile de la Giraglia

Looking south from the steamship 'Général Bonaparte' towards the extremity of Cap Corse. On the left is the rocky Pte d'Agnello, while to the right of the Ile de la Giraglia the coast decreases in elevation to the sandy beach of the Marine de Barcaggio.

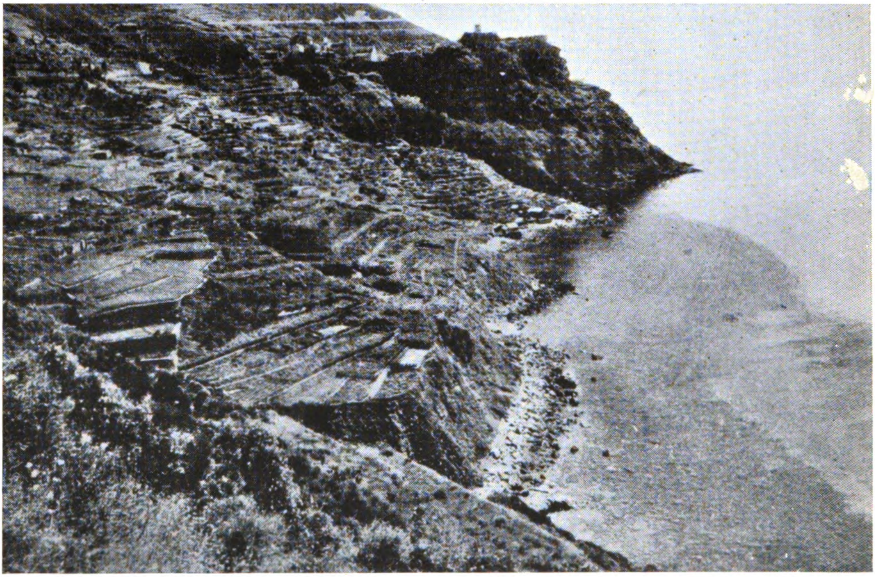


Plate 18. The coast of Cap Corse near Nonza

Looking south along a particularly rugged section of this coast. The hills rise steeply from the sea, and are terraced for cultivation. The coastal road, just visible at the top of the picture, is here 150 m. above sea level.

winds. The east coast is shelving, with shallow water offshore. There are eight ports (Fig. 18) which normally receive sea-going vessels, and of these only Bastia, Ajaccio, Calvi and Propriano are able to allow vessels to lie alongside the quays. Full details of these eight ports are given in Chapter XI (pp. 160–76). At the smaller ports and at the other anchorages shown on Fig. 18, all of which will accommodate sea-going vessels, transhipment into small boats is necessary for landing purposes. At frequent intervals round the coast are small bays and coves (known usually as *golfes*, but also as *marines* in Cap Corse (Plates 51, 63) and as *calas* in the south-west), which form havens for fishing-boats, and could be used for shallow-draught landing vessels. Sometimes the beaches have simple slipways or rollers to facilitate the haulage of the boats above the limit of the waves, which break very heavily on the sandy beaches when an on-shore wind is blowing.

Landing and penetration inland are not easy along much of the oast. The cliffs which bound a large proportion of it are bordered by rocky underwater platforms with islets and submerged and exposed rocks, and on the landward side rise steeply to rugged or forested ridges. Part of the east coast is backed by sand-dunes, *étangs* and unhealthy swampy plain. The majority of ports and anchorages, however are near the heads of gulfs to which flow rivers; their valleys form lines of access into the interior, usually followed by roads of varying quality. A *route nationale* (see p. 147) follows the circumerence of the island, at distances varying from a few metres to 8 km. from the sea. There is thus little difficulty in getting to any of the populated parts of the island from the main ports, although much of the mountainous interior is completely unpopulated (see p. 101) and has no communications other than mule-tracks. Further details of communications are given in Chapter X, and in Appendix IV.

In detail the coasts may be divided into six sections (Fig. 17):

(*a*) Cap Corse, from Bastia to the Golfe de St Florent, is about 65 km. (40 miles) in length (measured round the mean sea-level contour, as are other distances in this section).

(*b*) On the north-west, from the Golfe de St Florent to the Pte de Revellata, is a rugged but not deeply indented coast; it has a total length of 110 km. (68 miles).

(*c*) The deeply indented west coast stretches from the Pte de Revellata to Pte d'Eccica, a total length of about 480 km. (298 miles).

(*d*) The south-west section, from Pte d'Eccica to Cap Pertusato,

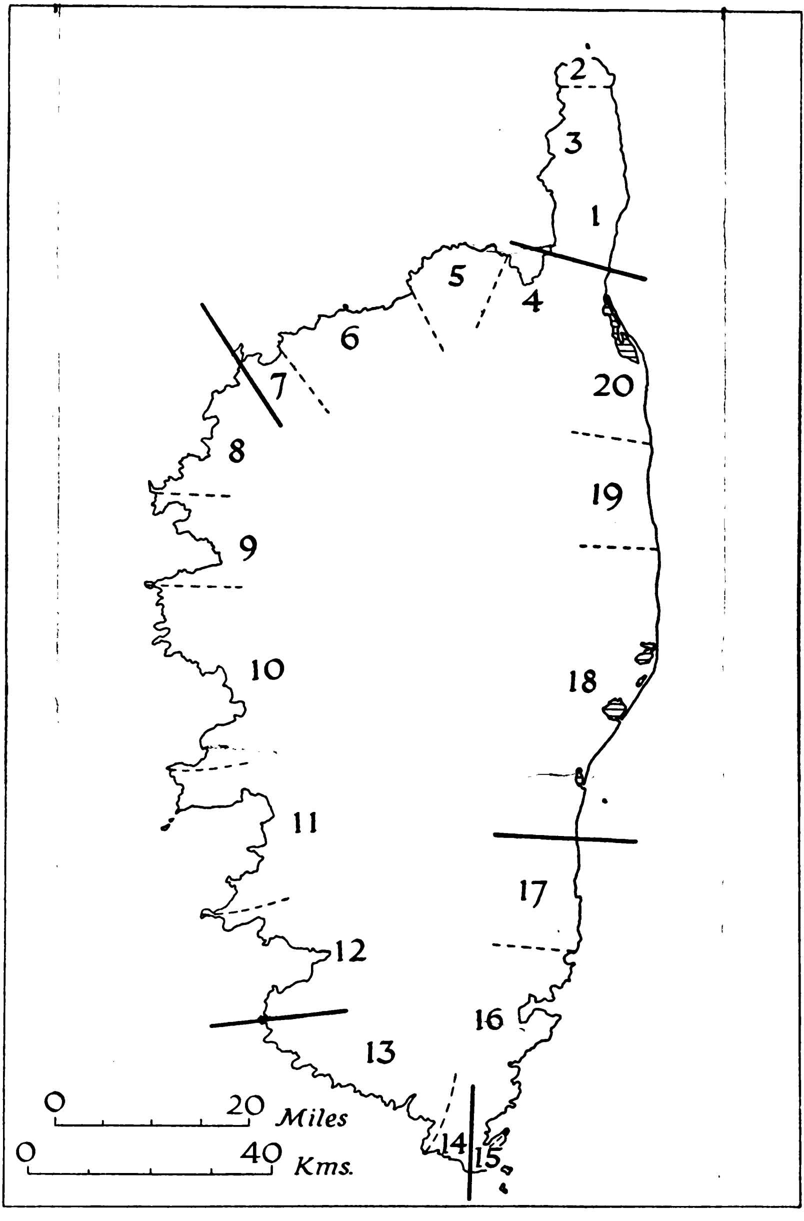


Fig. 17. Key map to coastal description
The figures refer to the twenty sub-sections in the text into which the coast has been divided, in order to facilitate detailed description.

has a less indented coast than (*c*), and is about 50 km. (31 miles) in length.

(*e*) The south-east section, from Cap Pertusato to Solenzara, has many of the characteristics of the west coast but to a less marked degree; it is 146 km. (91 miles) in length.

(*f*) The east coast, some 190 km. (118 miles) in length from Solenzara to Bastia, is low, flat and relatively smooth.

To facilitate the detailed description of the topography and of the communications of the coastal areas, the coast of Corsica has been divided into twenty sub-sections within the six main divisions; these are numbered according to Fig. 17. Reference should be made to the folding map on a scale 1 : 500,000 contained at the back of this volume.

The chief anchorages are mentioned and enumerated in the relevant sections of the text; details of available shelter, depths, nature of bottom, landing facilities and possible communications inland are summarized in a table (Appendix IV, pp. 196–201). The anchorages are numbered (i) to (xxix) in the text to correspond to this table. Ports are included in the list for completeness, but only the page reference to the relevant section in Chapter XI is given.

COAST OF CAP CORSE

The straight almost parallel coasts of the rectilinear Cap Corse (Fig. 9) are caused by the north-south orientation of the ridges. The coast descends steeply; in places on the west depths exceeding 500 m. are attained within 0·5 km. of the shore. Nowhere therefore have the short streams been able to build out their deltas appreciably. Especially on the east the rocks are relatively uniform, and wave erosion has produced a straight cliffed coast, interrupted only by small coves (*marines*). The cliffs are not vertical, but form rocky slopes at an angle of about 30° (Fig. 19). On the west coast, however, there are several resistant massifs, forming blunt headlands made of hard grey-green rocks. The north coast is steeper and more rugged.

Detailed Description of the Coast of Cap Corse

(1) *Bastia to Macinaggio*

The natural port of Bastia consists of a small bay enclosed by low headlands. It has been improved by the construction of several jetties and piers, and is the largest port and town in Corsica ((i), Fig. 56, Plates 54, 71–4, and see pp. 160–2).

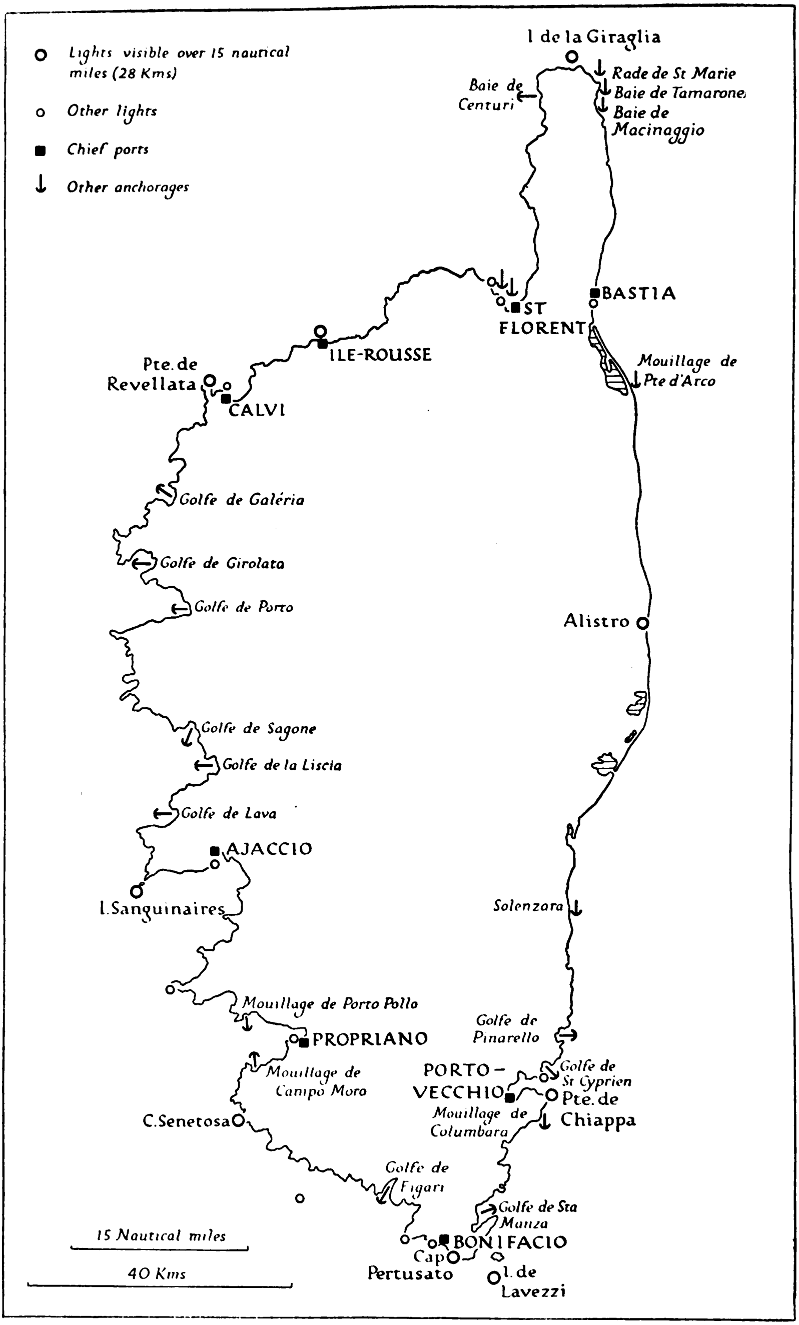


Fig. 18. Ports, lights and anchorages

The eight main ports described in Chapter XI are indicated. The other twenty-one anchorages which are enumerated in the text and listed in full in Appendix IV (pp. 196–201), are shown, and are named in every case, with the exception of those in the Golfe de St Florent (numbers vii, viii), which are named on a larger scale map (Fig. 56). Only the nine major lights are named.

The anchorages are taken from the British Admiralty Chart No. 1131 (London, 1874, large corrections 1900, small corrections 1940). The lights are taken from Chart No. 1131 and from the *Admiralty List of Lights, etc.*, part V, 'Mediterranean, Black and Red Seas' (London, 1941).

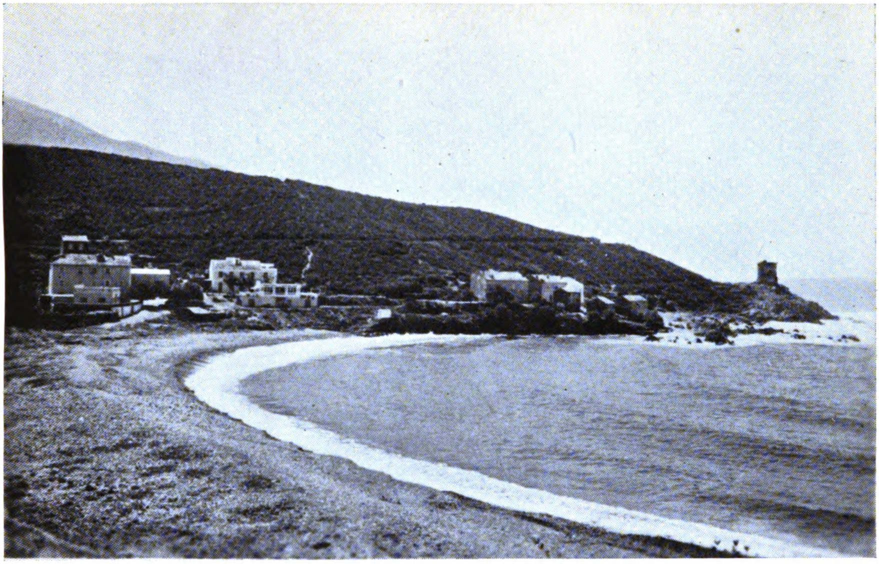


Plate 19. Marine d'Albo

One of the numerous small bays or *marines* on the coast of Cap Corse. Many of these bays have a shelving beach of shingle and a small fishing hamlet (see also Plates 57, 63).

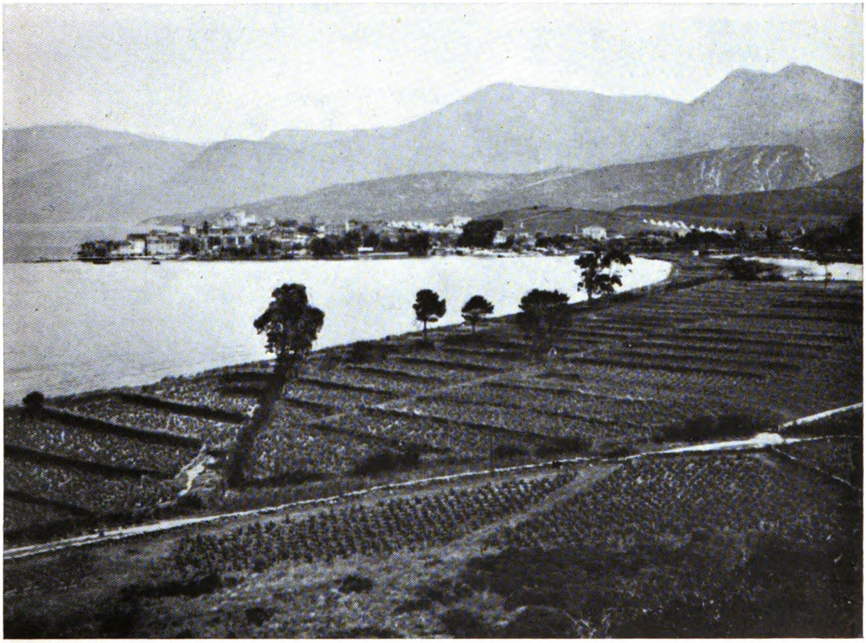


Plate 20. The head of the Golfe de St Florent

The village and quays (see Plate 75) are situated on the north-eastern side of the inner gulf. The river Aliso (right) spreads out as a large shallow estuary, and much of the area is marshy (see Fig. 57). Parts have been drained and planted with vines, while hedges at frequent intervals form wind-breaks.

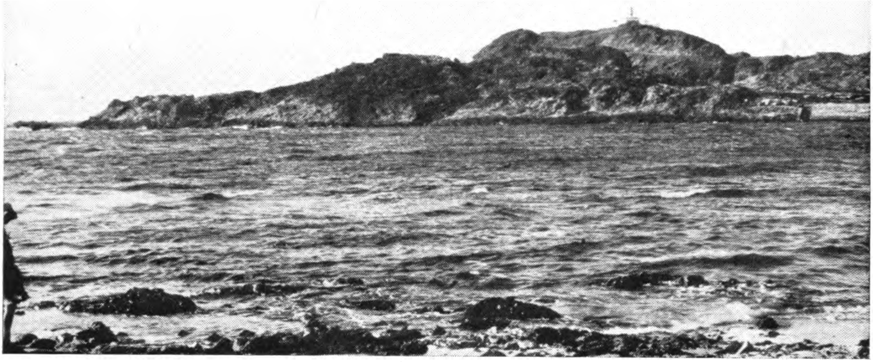


Plate 21. The lighthouse on Grande Ile-Rousse

The Iles Rousses derive their name (as do the Iles Sanguinaires) from the reddish rocks of which they are composed. The view looks northward from Ile Sicota.

Plate 22. Golfe de Calvi

The sandy shelving beach is bordered by low dunes covered with tussock grass. The railway from Porte-Leccia to Calvi skirts the bay on a low embankment.

For about 25 km. the coast trends uninterruptedly north with a slight convex bulge eastwards. Low cliffs terminate incipient headlands, which are formed by secondary spurs branching at right angles from the main ridge. Between the headlands are numerous small pebbly and sandy beaches across which flow short torrents; the largest of these is the Luri.

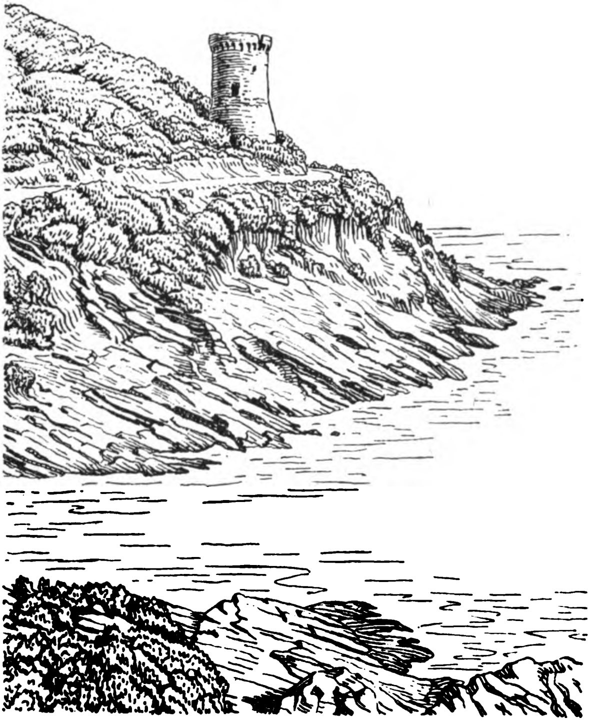


Fig. 19. The coast of Cap Corse near Losse (drawn from a photograph)

Much of the coast of Cap Corse is bordered by low cliffs. A road (N. 198) follows the coast closely. The tower (near Losse, about 3 km. north of Marine de Pietracorbara) is one of a total of ninety-one built by the Genoese round the coast of Corsica.

Communications. A main road follows the coast closely above the cliffs from Bastia to Macinaggio (Fig. 19). Other main roads cross the peninsula by numerous zigzags from these towns to Ersa and St Florent respectively. Numerous minor roads climb up beside the rivers to the villages in the upland basins, but only one of these, from Luri to Pino, actually crosses the watershed.

(2) *The North Coast of Cap Corse*

At Macinaggio is a bay (ii) (Plate 15) bounded on the north by the Pte de la Coscia, and immediately north of this is the Baie de Tamarone (iii); both form moderately safe anchorages. The north-east corner of Cap Corse, together with the group of the three Iles de Finocchiarola lying about 100 m. from the coast, is bounded by steep rugged cliffs. The coast then trends north-west; a moderate anchorage, the Rade de Ste Marie (iv), lies between the shore on the west and the Iles de Finocchiarola and the Banc de Ste Marie on the east. Cap Corse itself is a square-ended peninsula with blunted promontories, bounded by steep black cliffs and rocky shoals. North of the coast a rocky bank with depths less than 18 m. (10 fm.) extends for nearly 2 km. offshore; north of this bank lies the Ile de la Giraglia, a rugged mass of whitish rock (Plate 16). The only inlet is the broad Marine de Barcaggio, where there is a small fishing village behind the sandy beach, but there is no anchorage for larger vessels. At the north-west corner are the promontories of Punta Corno di Becco and Capo Bianco.

Communications. There are no roads north of the major road between Macinaggio and Ersa, although two tracks run northwards from this road to the scattered habitations at Barcaggio and Tollare on the north coast.

(3) *West Coast of Cap Corse*

At Capo Bianco the coast continues south to the shallowly indented Baie de Centuri (v), south of which is the Ile de Centuri, connected with the coast by a ridge of rocks. The Ile is bordered to the north-north-west by rocks covered with less than 0·3 m. (1 ft.) of water, while 4 km. north-west is a rocky platform, the Haut-fond de Centuri, with a minimum depth of 13 m. (7 fm.). The coast is continued south by gentle indentations (Golfe d'Aliso and Marine d'Albo), at the head of which are small sandy beaches (Plates 19, 63), alternating with headlands (Pta Minervia and Pte di Canelle). Elsewhere the coast is fairly straight, with sloping cliffs (Plates 17, 18) and small sandy beaches. It then continues south to form the east coast of the Golfe de St Florent. There are no anchorages for sea-going vessels between the Baie de Centuri and the Golfe de St Florent, owing to the lack of shelter from westerly winds.

Communications. The main road follows the coast very closely and is rarely more than 200 m. from the shoreline. It rounds the promontories with difficulty; frequently it has been blasted out of the steep rock face (Plate 63). Sometimes a higher parallel minor road contours the ridges at a height of 150–250 m., while numerous short roads climb to the villages in the upper basins.

NORTH-WEST COAST

The main trend of the ridges and valleys is approximately parallel to this coast. As a result it is not deeply incised, although in detail it reveals the alternation of short rugged promontories with but slightly indented bays. The most prominent headlands, such as the Pte de Curza, the peninsula of Iles Rousses, and the Pte de Revellata, terminate in rugged cliffs which rise steeply to heights between 10 and 25 m. Other parts of the coast are less sheer but still rocky and desolate. An underwater plateau slopes gently for 4 or 5 km. to the 100 m. submarine contour line, beyond which the descent is steeper; on it stand numerous rocky banks and shoals.

The Golfe de St Florent and the Golfe de Calvi are the only prominent inlets. The former is the result of the submergence of a basin formed in the angle where the Cap Corse fold bends south-westward. The Golfe de Calvi was also formed by the submergence of a lowland basin between the ridges.

Along this coast, as elsewhere in Corsica, the numerous streams deposit much alluvium where they enter the almost tideless sea. Thus the Golfe de St Florent is being slowly filled up by the river Aliso and the Golfe de Calvi by the rivers Ficarella and Secco.

Detailed Description of the North-west Coast

(4) *Pte Vecchiaja to Pte Mortella: Golfe de St Florent*

The Golfe de St Florent is 5·5 km. across between the two headlands of Pte Vecchiaja and Pte Mortella, and penetrates some 5 km. inland (Fig. 57). The bottom is mainly of sand. From Pte Vecchiaja the coast is straight and consists of low cliffs; north-east of the town of St Florent is a sandy beach about 100 m. wide. The head of the gulf consists of drained marshland and sandbanks, across which flow the Fiuminale and Aliso rivers; the mouth of the latter is almost blocked by a sandspit and a small sandy island. The gulf does not afford good accommodation for large vessels, but there are three possible anchorages (vi, vii, viii). While St Florent is strictly speaking hardly a port, a few vessels call annually and unload a few hundred tons of cargo there (see p. 163, Plates 20, 75).

The coast trends 8 km. north-west to Pte Mortella, and consists of cliffs about 10–15 m. high; the prominent headlands of Pte de Fornali, Pta del Cepo and Pte Mortella alternate with shallow embayments.

Communications. From St Florent a road runs north along the west coast of Cap Corse; it branches after 6 km. over the Col de Teghime to Bastia. South of the town a road rounds the gulf, then leaves the coast to cut directly over the hills towards Ile-Rousse. There is only a mule track on the west side of the gulf, and there are no bridges over the streams. A secondary road runs inland along the valley of the Guadelle (a tributary of the Aliso) to Oletta and another branches off the Ile-Rousse road 5 km. from St Florent; it zigzags steeply over the ridges to Santo Pietro di Tenda and other upland villages.

(5) *Pte Mortella to River Ostriconi*

This stretch of coast consists of an almost continuous series of small bays separated by cliffs, which are fringed by reefs and outlying rocks. The most prominent points are Pte de Curza and Pte de l'Alciolo; the latter rises in great rugged slopes to a height of 170 m. in about 600 m. The bays are not deeply indented and have sandy beaches; where torrents reach the sea there is often a small *étang* of brackish water. The most prominent bay, surrounded by rocky slopes, is the Anse de Malfalco, but there is no anchorage between St Florent and Ile-Rousse. Behind the coast is the rugged virtually uninhabited massif of Agriates, which culminates in prominent pointed summits from 400 to 500 m. high.

Communications. There are no roads along this coast or within 15 km. of it. A few mule tracks connect scattered temporary habitations. Penetration inland from the coast is extremely difficult, and possible only on foot.

(6) *River Ostriconi to Golfe de Calvi*

Except for sand and mud flats at the mouths of the rivers Ostriconi and Regino, this section of the coast as far as the Iles Rousses is relatively straight, bordered by low cliffs. The land rises in about 3 km. to ridges over 300 m.

The Iles Rousses group consists of four small islands with numerous rocky islets; they are made of reddish-yellow granitic rocks and are the eroded remnants of a once much longer promontory (Fig. 58). The largest, Grande Ile-Rousse, is connected by a causeway with the southernmost Ile Sicota, which in turn is connected by another causeway with the coast immediately north-west of the town of Ile-

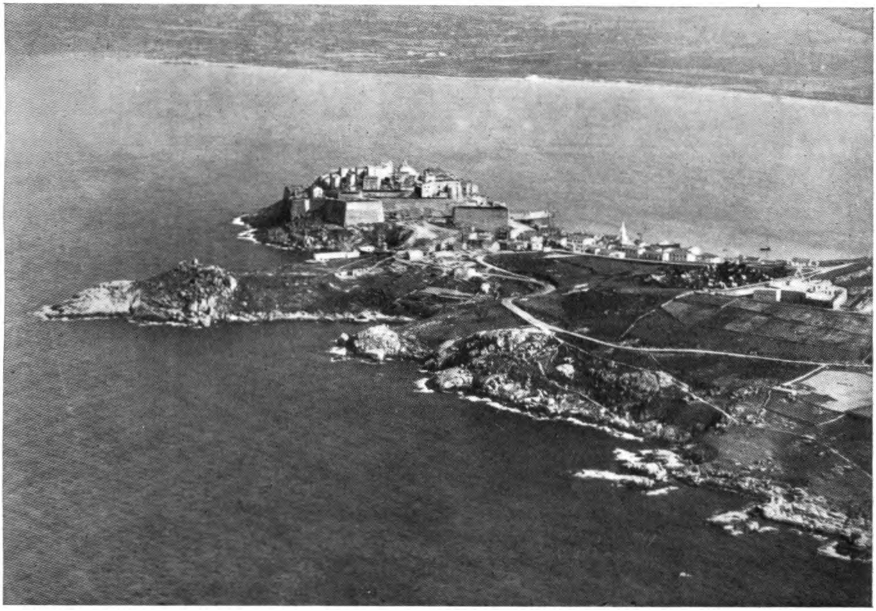


Plate 23. Pte St François and the town of Calvi

Looking east across the *citadelle* and town of Calvi with the gulf beyond. The Pte St François is the small rocky peninsula on the left (see Fig. 59).

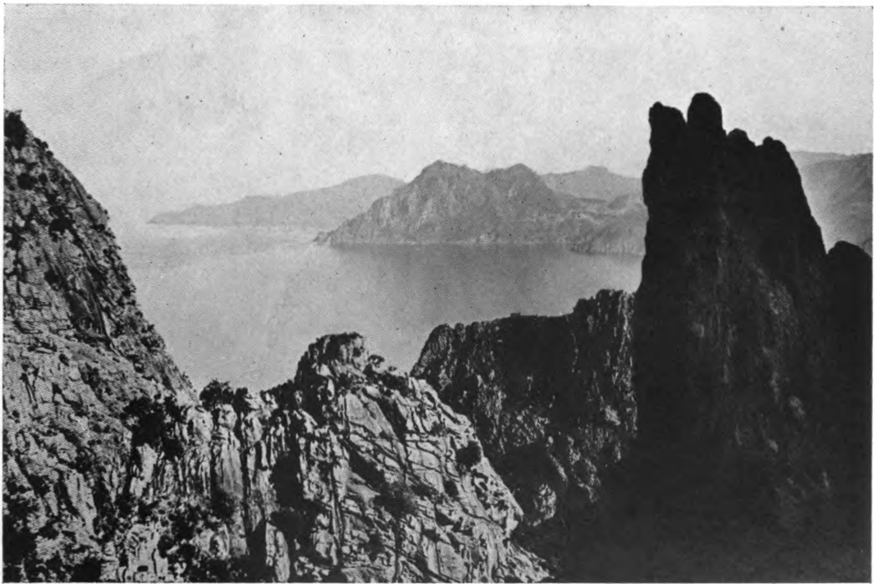


Plate 24. Golfe de Porto and the Calanques de Piana

This is reputed to be one of the finest pieces of coastal scenery in Europe; it owes its character to the contrasts of red granite, dark green chestnuts and the blue waters of the bay. In the foreground are the Calanques de Piana (see p. 11, Fig. 20 and Plate 64).

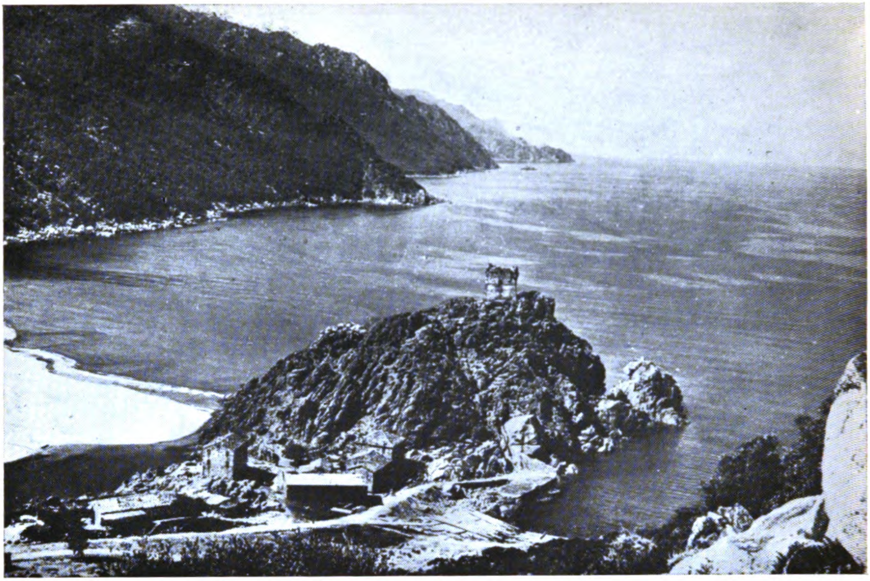


Plate 25. The head of the Golfe de Porto

At the head of the gulf is a sandy cove. The commune of Porto consists of two little hamlets; the lower, or *Marine*, clusters on the landward side of a granite promontory, and has a small quay for fishing boats and timber-exporting vessels.

Plate 26. A landing-stage near the head of the Golfe de Porto

This was used by a private company, which also owned the floating derrick, to export timber, cement and granite chips from the Evisa district.

Rousse (Plates 8, 47, 48). The two northern islands lie north-west of Grande Ile-Rousse. A mole has been built out into the bay from the causeway joining the two islands, thus forming the port of Ile-Rousse ((xi), Fig. 58 and see p. 163).

West of Ile-Rousse there are numerous minor indentations and headlands, many exposed and submerged rocks, notably La Galère which lies north-east of Pte Vallitone, and rocky islands, such as the Ilot de Spano. The main indentation is the Baie de l'Algajola; there is no anchorage for large vessels, but 750 m. west of the village of Algajola is the small fishing harbour of St Damiano, which is partially protected by a jetty from northerly winds.

Communications. The major road from Bastia to Calvi follows the coast at a distance of from 50 m. to 2 km. from the sea; it passes through Ile-Rousse. Near Lumio (east of the Golfe de Calvi) another major road zigzags into the interior in an easterly direction to Belgodère. Several minor roads climb up into the hills from Ile-Rousse and link the villages between the two major roads. The single-track railway from Ponte-Leccia winds its way through the hills from Belgodère to Ile-Rousse, thence follows the coast to Calvi on the seaward side of the coast road.

(7) *Golfe de Calvi to Pte de Revellata*

Between the low headlands of the Pte de Caldano and the Pte St François is the semicircular Golfe de Calvi (Fig. 59, Plates 22, 23). Apart from low cliffs on the east, the bay is fringed by a smooth sandy beach. Two rivers, the double channelled Fiume Secco and the Ficarella, have built up an undulating plain of alluvium, over which meander numerous small streams. West of the Ficarella and immediately behind the sandy beach are several large areas of marsh; the biggest is the Marais de Pagliazze. The town of Calvi is built on a rocky point south of the Pte St François (Plates 23, 76). The harbour, which has two quays and a small jetty ((x), Fig. 59 and see p. 166), is situated south of the town.

About 2 km. west of the Pte St François is a long headland ending in the steep cliffs of the Pte de Revellata. The eastern side of this peninsula slopes gently to the sea.

Communications. The coast road passes through Calvi, then continues west to the south of the Pte de Revellata. Near the mouth of the Ficarella a secondary road joins the coast road with Calenzana about 8 km. to the south-east. The single-track railway from Ponte-

Leccia follows the coast closely round the gulf, terminating at Calvi (Plates 22, 69).

West Coast

The peninsulas and gulfs of western Corsica form the most rugged, wild and broken portions of an island coastline which as a whole is characterized by these features. The submerged valleys form deeply indented V-shaped gulfs, separated by ridges running out to sea as rugged headlands. There are four main gulfs, the largest of which is the Golfe d'Ajaccio, about 18 km. wide between its containing headlands and indented approximately the same distance.

The long-sustained effects of differential erosion by the waves upon rocks of varying degrees of resistance can be seen both on a large scale and in detail. The irregularities made by subaerial erosion before submergence have been emphasized by wave erosion. The margins of the five great capes enclosing the gulfs are dissected into numbers of jagged promontories, continued seawards by rocky islets and shoals.

The numerous rivers have built out small deltas, which have thus smoothed the heads of the gulfs. The deltaic plains are not very extensive, however, because the water deepens rapidly. In the Golfe d'Ajaccio, for example, the water is over 500 m. deep less than 1 km. from the shoreline.

While all the major and some of the smaller gulfs provide anchorages, they are extremely exposed to westerly winds and are generally insecure.

The hinterland behind the coast consists of numerous rugged ranges, rising to distant but visible mountains over 2,000 m. high.

Detailed Description of the West Coast

(8) *Pte de Revellata to Pte Palazzo*

The western side of the Pte de Revellata is extremely rugged; numerous spurs project westwards, notably the Pte Bianca, and the coast is bounded by cliffs from 20 to 50 m. high. The coast trends south and then west to the rounded granite headlands of Cap al Cavallo and the steep cliffs of the Capo della Morsetta. A low islet and sunken rocks lie about 200 m. south of the latter. South of this cape is the Baie de Cravani, which is separated by the prominent red granite outcrop of Pte de Ciuttone from the Golfe de Galéria, a square-sided bay about 4 km. wide, which forms the only reasonably secure anchorage along this stretch of coast (xi). The village of Galéria lies near the southern corner of the gulf. This stretch of the coast is low, and both gulfs have broad sandy beaches. The Fango, which flows into the Golfe de Galéria, widens out to 500 m., and is extremely shallow.

The coast continues south-west for about 10 km. and becomes increasingly rugged and lofty, with occasional small coves, as at Ficajola near Piana (Plate 25). It terminates in a great headland of reddish rock 5 km. across. The northern corner of this is Pte Palazzo, off which are situated the Ilot Palazzo on the north and Ile Gargalo on the west. It is indented on all three sides by cliff-bound coves, the largest of which is the Golfe d'Elbe. The southern corner is formed by the high cliffs of Pte Scandola. Behind the cliffs is a rocky plateau rising above 600 m.

Communications. The roads in this section of the coast are typical of the west coast generally. A major road follows approximately the coast, but cuts across the promontories; in places it is more than 6 km. from the shore as it zigzags over, or contours round, each successive ridge. There are no routes into the interior except one minor track up the Fango valley.

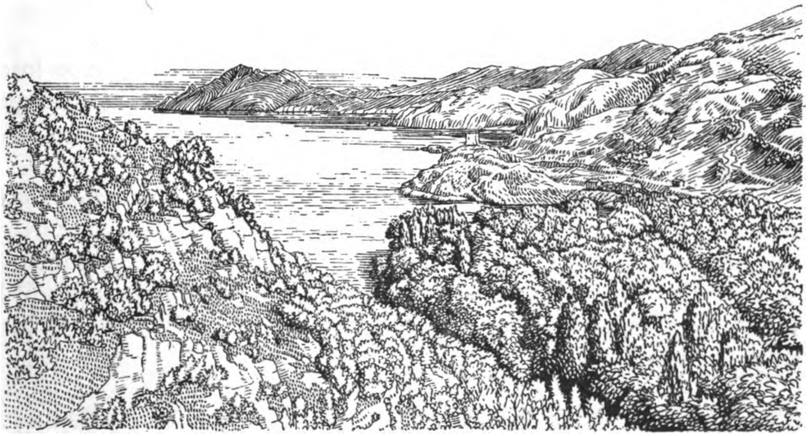


Fig. 20. The head of the Golfe de Porto (drawn from a photograph)
This gulf is the most northerly of the four great inlets on the west coast (see also Plates 24–6).

(9) *Pte Palazzo to Capo Rosso*

Between these two rocky headlands is the Golfe de Porto ((xiii), Fig. 20 and Plates 24–6). The south-east trend of its north shore is interrupted by the Golfe de Girolata. This is bounded on the south by the square peninsula of Cap Senino, which rises steeply to the rugged summit of Mt Senino (over 600 m. high). The peninsula of Capo Rosso represents Corsica's most westerly extension; it ends in rugged cliffs flanked by submerged and exposed rocks, while there are numerous deep caves and grottoes. Into the head of the gulf flows the river Porto, meandering between sand- and mud-banks.

Communications. The coast road contours round the head of the gulf to the small town of Porto, then continues south. Minor roads wind up into the hills on each side of the river Porto towards Evisa.

(10) *Capo Rosso to Cap de Feno*

The coast continues south for about 12 km., pointed peninsulas alternating with inlets, but at Pte de Cargèse (Plate 12) it trends south-east to form the northern shore of the broad Golfe de Sagone, within which are a number of subsidiary bays, notably the Baie de Sagone (xiv) and the Golfe de la Liscia (xv); both of these can be used as anchorages. The granite rocks form a low coastline with few cliffs, although there are occasional rocky points. The southern shore trends south-west, interrupted by the shallowly incised Golfe de Lava (xvi) to Cap de Feno, the northern point of the third great west coast promontory.

Several rivers, notably the Sagone, Liamone and Liscia, drain into the gulf; each has a small alluvial flat at its mouth. The Liamone is about 200 m. wide, yet is so shallow that a sand bar usually blocks its mouth.

Communications. The gently sloping coast allows the major road to follow the coastline closely round the gulf. It then cuts south over the ridges to Ajaccio. From Sagone another major road goes inland up the Sagone valley to Evisa, thence over the Col de Vergio (1,464 m.) to the Golo valley. Other minor roads link up the villages on the ridges behind the coast.

(11) *Cap de Feno to Capo di Muro*

The southern point of the third great west coast promontory is the Pte della Parata. The Iles Sanguinaires are of similar rocks; they consist of Ile Grande Sanguinaire and three islets, and extend for over 3 km. south-west of Pte della Parata, to which they are connected by rocks and shoals (Plates 13, 15). The north coast of the gulf runs due east parallel to a ridge over 500 m. high; as a result the coast is relatively straight. Along the south coast Pte de Sette Nave, Pte della Castagna and Capo di Muro alternate with shallow indentations

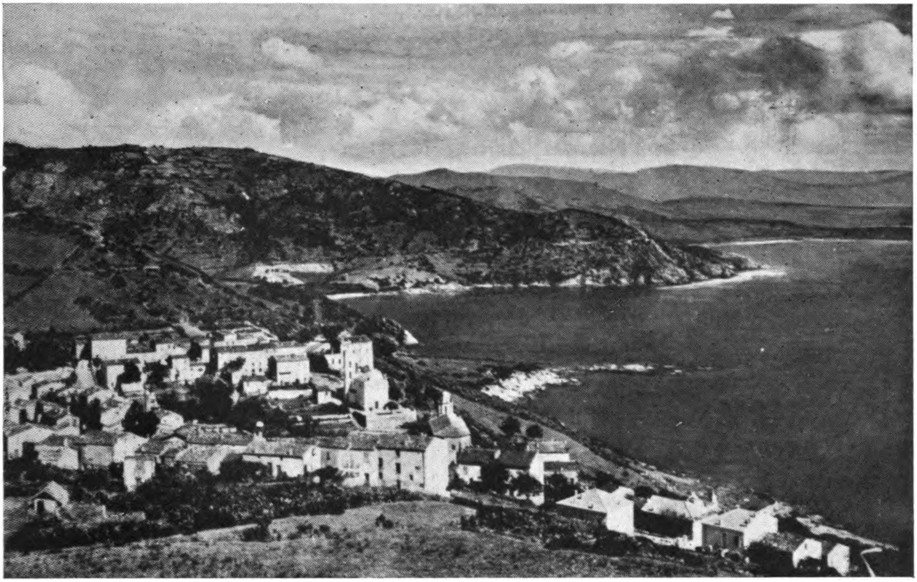


Plate 27. Baie de Cargèse

This bay, near the shores of which is an attractive village founded by Greek refugees at the beginning of the eighteenth century (see pp. 114, 116), is a small indentation on the northern shore of the Golfe de Sagone.

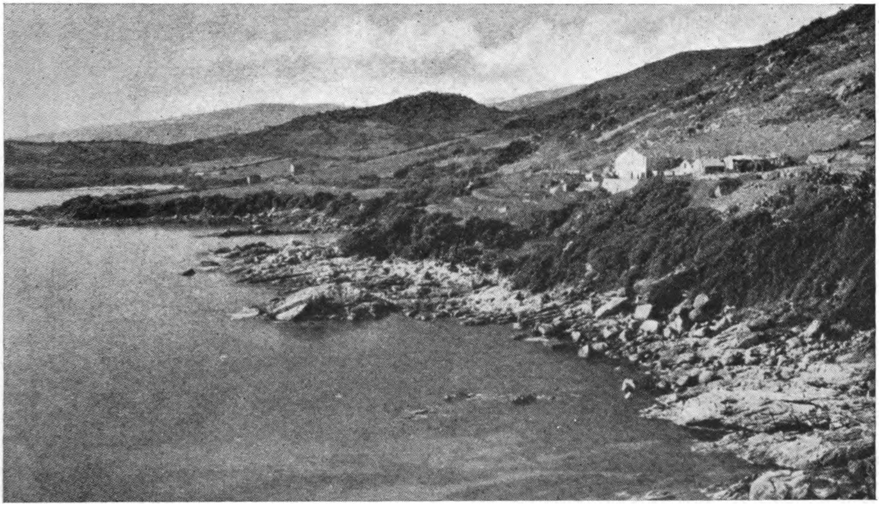


Plate 28. Golfe de Sagone

The northern shore of the gulf has few cliffs, but is bordered by a rocky boulder-strewn foreshore backed by low hills.

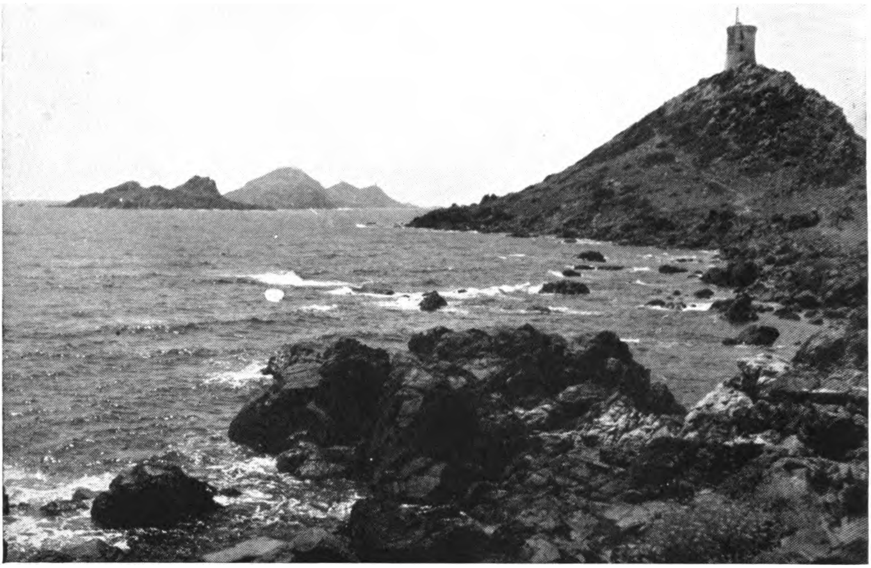


Plate 29. Pte della Parata and the Iles Sanguinaires

On the Pointe is one of the many Genoese watch-towers; it now forms a prominent landmark. Between the Pointe and the islands is the Passe des Sanguinaires. The largest island, the most distant one with two peaks, is the Ile Grande Sanguinaire, on which stands a lighthouse.

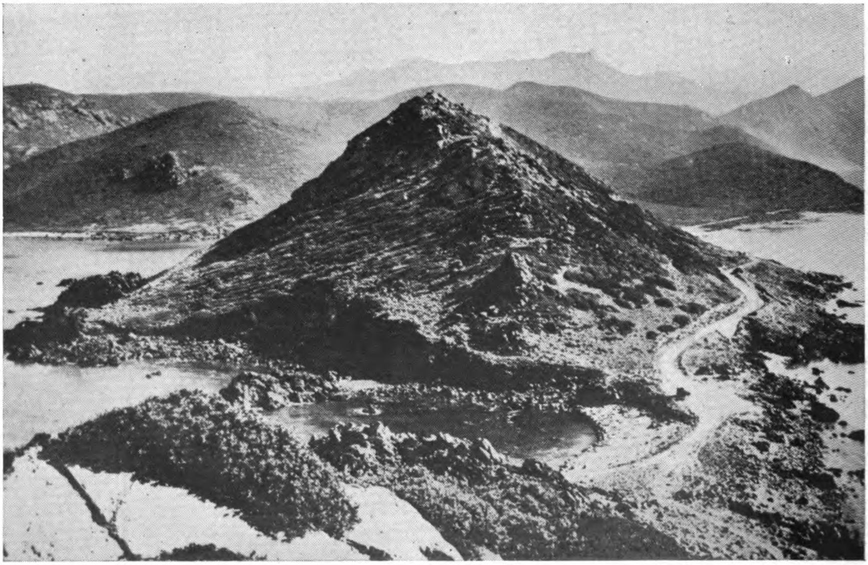


Plate 30. The 'Route des Sanguinaires'

This popular tourist road, 11·7 km. in length, runs from Ajaccio along the north coast of the Golfe d'Ajaccio to the Pte della Parata. On the right is the Golfe d'Ajaccio; on the left, the open sea.

(Fig. 7). The most striking group of submerged and exposed rocks are Les Scoglietti, east of the port of Ajaccio. The port is situated in a bay cut squarely into the north-east corner of the gulf ((xvii), Fig. 60, Plates 31, 79–82, and see pp. 166–71).

The head of the gulf consists of a broad sandy beach, behind which is the Campo dell Ora (Plate 16), an alluvial tract of marsh and *étangs* some 7 km. long. The river Gravone reaches the gulf through two branches, the southern one of which is joined by the Prunelli.

Communications. From Ajaccio a main road runs north-east up the Gravone valley over the Col de Vizzavone (1,162 m.) to Corte. The west coast road, after crossing the rivers, bends away from the coast over the ridges and continues south. The north coast of the gulf is paralleled by a road to the Pte della Parata, the 'Route des Sanguinaires'. From Pisciatella minor roads run along the south shore of the gulf up the Prunelli valley and over the ridges to the south.

The single-track railway, of which Ajaccio is the terminus, follows the Gravone valley into the interior of the island.

(12) *Capo di Muro to Pte d'Eccica*

Between these two rugged promontories is the deeply cut Golfe de Valinco (Fig. 61), near the head of which is the important port of Propriano ((xviii), and see p. 171). Both shores, but markedly the northern one, are indented by minor gulfs. From the northern shore projects the prominent Pte de Porto Pollo, from the southern shore the Pte de Campo Moro. Each provides an anchorage to the east of it ((xix) and (xx) respectively). Rivers flowing into the gulf include the Taravo, which has built a small marshy delta and has split into two channels—the Baraci and the Rizzanèse. The last of these rivers branches near its mouth; one channel meanders south for 2 km. parallel to the coast, separated from the sea only by areas of sandbanks.

Communications. The major road from Ajaccio crosses the head of the Golfe de Valinco at Propriano and continues south-east to Sartène. Minor roads parallel the south coast of the gulf and climb up to the hill villages.

South-west Coast

Except for the Golfe de Ventilegne there are no large indentations in this section of coast, but in detail it consists of numerous short low headlands alternating with small rounded bays known as *calas*. They are shallow, wide and open to the sea, and into them flow small coastal torrents. The Golfe de Figari forms a pointed V running for about 10 km. into the land. The coast is steep and rugged, and is flanked for some distance offshore by rocky shoals and islets. In the south, level bedded limestones form steep cliffs, with clearly marked tabular bands.

The hinterland of the coast consists of numerous parallel ridges, the highest of which is the wooded Montagne de Cagna.

Detailed Description of the South-west Coast

(13) *Pte d'Eccica to Capo di Feno*

Pte d'Eccica, flanked by cliffs about 20 m. high, rises in 500 m. to the prominent summit of Palo d'Eccica. It is separated from the barren Ile d'Eccica by a rocky channel. Capo Senetosa has numerous groups of rocks which extend nearly 1 km. offshore. The coast trends south-east, and the shallow Calas di Roccapina, di Fornello, d'Arbitro and Capinero alternate with rounded headlands. A narrow ridge forms the jagged Pte de Roccapina, and is continued by shoals which end nearly 5 km. offshore as the rocks of Les Moines. Farther south is the Golfe de Figari (xxi), an inlet 5 km. long, containing numerous small islands and shoals, and the Golfe de Ventilegne, a broad V-shaped inlet terminating in the narrow steep-sided estuary of the Ventilegne river. A ridge then projects boldly south-west, ending in the high cliffs of Capo di Feno.

Communications. The road from Propriano crosses the ridges to Sartène and to the Ortolo valley, which it follows to the coast. There are no communications west of this, except for a single minor road from Tizzano on the coast to Sartène. From the Ortolo valley the major road continues south-east to Bonifacio, keeping well inland to avoid the heads of the gulfs.

(14) *Capo di Feno to Cap Pertusato*

East of Capo di Feno there is a marked change from hard granitic rocks to softer sedimentary rocks consisting chiefly of limestones (Fig. 5). Behind the coast are plateaux about 50–60 m. high. The base of the limestone is attacked vigorously by the waves; thus although the rocks are relatively soft they frequently form steep and even overhanging cliffs (Fig. 21, Plates 33, 34). On the north side of the Baie de Bonifacio is the Pta della Madonetta, where erosion of the base of the limestone has been so active that grottoes have been excavated. The largest, the Dragonetta, has an entrance 5 m. wide and 2 m. high (Plate 35), and inside is a cavern 30 m. high hung with stalactites. The horizontal or gently dipping layers have caused the plateaux behind the coast to rise in terraces. The town of Bonifacio (see p. 171) is in part built on an elevated limestone peninsula with overhanging sides, which is about 300 m. wide and projects westward for 1·5 km. Between it and the mainland to the north is a rectangular gulf 200–300 m. wide, forming the port ((xxii), Fig. 62, Plates 33, 88, and see pp. 171–4).

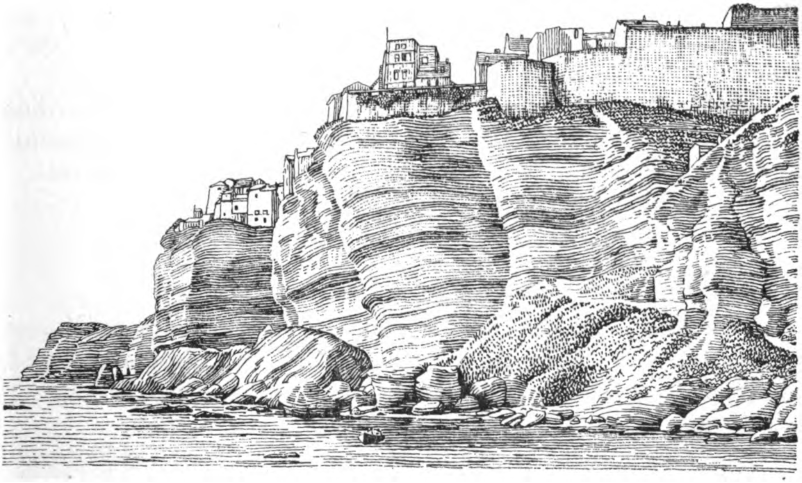


Fig. 21. The limestone cliffs at Bonifacio (drawn from a photograph)
The old part of the town of Bonifacio is built halfway along a limestone peninsula, nearly 2 km. in length, which lies parallel to the coast (see pp. 171–4 and Figs. 5, 62). On the landward side it is protected by high walls (see Plate 46), on the seaward side by vertical or overhanging cliffs eroded by the sea in the horizontally bedded limestone. It thus formed a fortress of great strength and has withstood several great sieges (see Chapter VII *passim*).

Communications. From Bonifacio a major road runs north for 1·5 km., from which point roads continue at some distance from the coast towards Sartène and Porto-Vecchio. A minor road crosses the hills in a north-east direction to the small Port de Santa Manza. It was intended that the single-track east coast railway from Bastia to Porto-Vecchio should be extended to Bonifacio; preliminary work was started in 1938, but the scheme was temporarily shelved in 1939.

SOUTH-EAST COAST

Between Cap Pertusato and the Golfe de Pinarello there are many of the characteristics of the west coast, but to a much less marked degree. The same ridges and valleys whose submerged extremities form gulfs and headlands orientated south-west on the west coast, produce on the east coast similar features facing north-east. The water off the coast is much shallower than on the west; the Golfe de Porto-Vecchio is less than 20 m. deep, and the Straits of Bonifacio are little more than 50 m. deep. North of the Golfe de Pinarello the coast is straighter, but still bounded by rocky cliffs over 10 m. high; rounded promontories project very little beyond the small bays, into which flow numerous mountain torrents.

Behind the coast, pine-covered hills rise to heights exceeding 1,300 m. in the south (Chaîne des Aiguilles de Bavella), culminating in the rugged dark-coloured mass of Sommet della Vacca Morta.

Detailed Description of the South-east Coast

(15) *Cap Pertusato to Pte Capicciolo*

Immediately east of Cap Pertusato the coast trends north-east parallel to a steep ridge. As a result, the shore is rugged and cliffed, but is relatively unindented. The ridge ends in Pte Capicciolo (Fig. 5), which rises steeply to a rocky summit nearly 120 m. high.

The Straits of Bonifacio are 12 km. in width between Cap Pertusato and Pte Falcone in north Sardinia. The effective channel is narrowed to less than 5 km. by islands and shoals on both the north and south sides of the Straits. The Corsican islands lie on a rocky shelf, a prolongation of the south-east coast, which is covered by less than 50 m. (28 fm.) of water, and much of it consists of rocky shoals barely submerged. The two largest islands, Ile de Lavezzi and Ile de Cavallo, are rugged masses 20 to 30 m. high; they are connected with each other and with smaller islets by submerged rock ridges. The islands to the south of the Straits are the Italian-owned Arcipelago della Maddalena.

Communications. Except for a mule track along the crest of the Capicciolo ridge, there are no communications along this part of the coast or into the interior.

(16) *Pte Capicciolo to Golfe de Pinarello*

The northern and southern shores of the Golfe de Santa Manza are paralleled by ridges; the former ends in Pte de Rondinara. A smaller

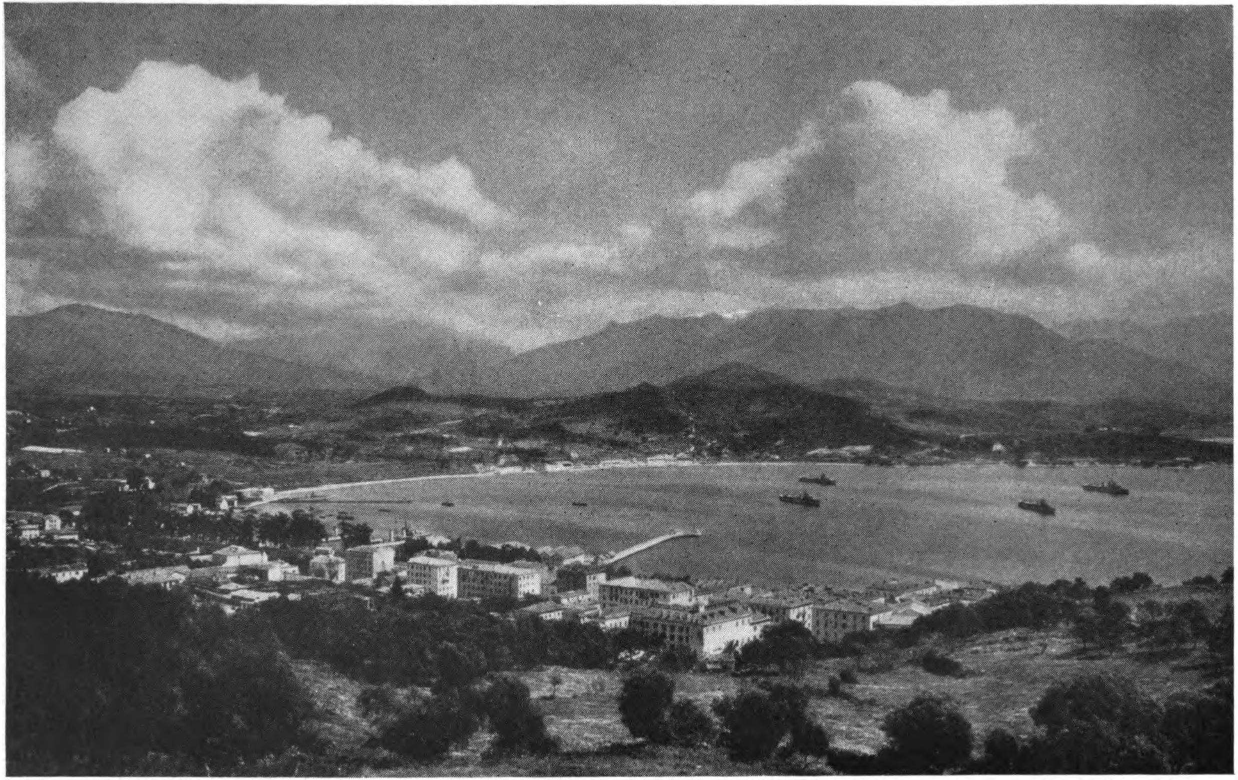


Plate 31. Golfe d'Ajaccio

The port and town of Ajaccio lie on the western side of a bay cut squarely into the northern shore of the main gulf. The prominent white jetty is the Jetée de Margonajo. Light units of the French fleet sometimes anchor in the inner bay.

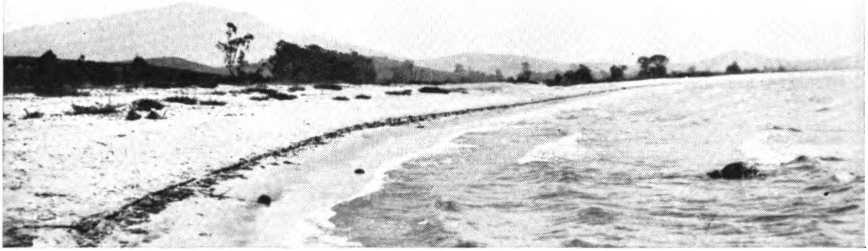


Plate 32. Campo dell' Oro

This alluvial plain built out into the Golfe d'Ajaccio by the river Gravone is marshy and malarial; large numbers of eucalypts have been planted. Formerly the Ajaccio racecourse (Hippodrome de Vignetta) occupied part of the level expanse. The *Carte Michelin* (Clermont-Ferrand, n.d.) indicates that it was more recently used as an airfield.

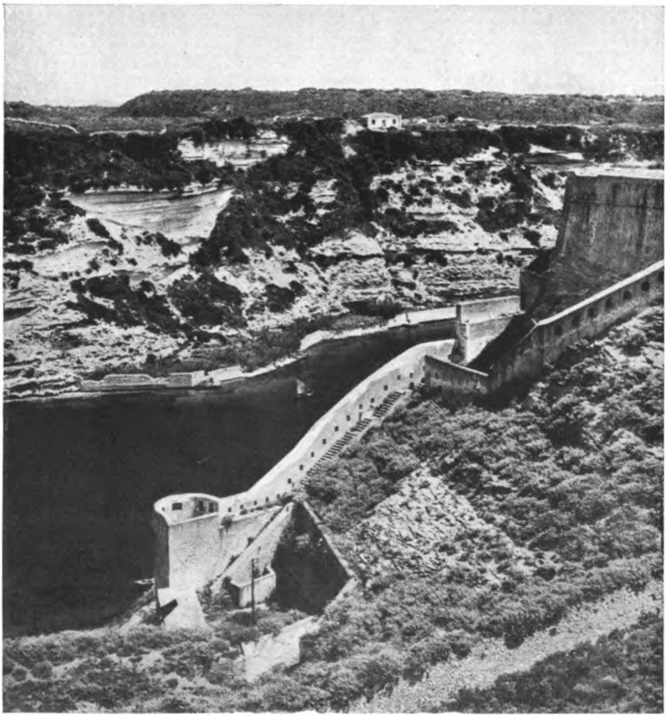


Plate 33. Baie de Bonifacio

The town and *citadelle* of Bonifacio are built on a long peninsula, separated from the mainland by a narrow bay some 700 m. wide. On the north side of the bay is the scrub-covered limestone plateau of Capello, which has a uniform level surface about 200 m. above the sea (see Fig. 63 and Plates 85–6).

opening within the larger gulf forms the Golfe de Santa Manza (xxiii). Several streams enter the gulf through shallow V-shaped estuaries. The river Balistra is cut off from the sea by a sand and shingle bank, behind which is a large *étang*. The rocky coast trends north-east for nearly 20 km. to the Pte de Chiappa; the cliffs are bordered by a rocky bank extending nearly 1 km. offshore. The five main islands and numerous rocks of the Iles de Cerbicales are situated nearly 2 km. from the shore; between them and the coast is a fairly sheltered anchorage, the Mouillage de Columbara (xxiv).

The Golfe de Porto-Vecchio is about 2·5 km. wide at its entrance between Pte de Chiappa and Pte St Cyprien (Fig. 63). The gulf is shallow, and rivers (notably the Stabiacco and Oso) deposit much silt (Plate 36); nevertheless, it offers the best natural anchorage on the east coast, although it is by no means satisfactory ((xxv), and see pp. 174–6). The Oso divides into three branches at its mouth; these have built out a marshy delta about 4 km. broad. This delta has already halved the width of the inner gulf, and in the north it is less than 5·5 m. (3 fm.) deep. The southern coast of the gulf is formed of high cliffs with small sandy beaches in the coves. The town of Porto-Vecchio is built on a gently sloping ridge about 50 m. high at the head of the gulf.

Immediately north of the low rugged Pte St Cyprien is the gulf of the same name (xxvi). Its former outline has been converted into a smooth semicircle by long straight sandbanks, behind which are shallow *étangs*. The largest, the Étang d'Araso, is about 1·5 km. long by 0·5 km. broad.

The coast continues north, bordered by low cliffs; the Pte Capicciolo, a gently curving promontory, about 0·75 km. in length, sloping gently to the sea, is the most prominent feature.

The northern and southern shores of the semicircular Golfe de Pinarello (xxvii) are formed by low cliffs bordered by rocky banks with depths of less than 5 m. (2·5 fm.). The south-west shore is sandy; behind it lie several *étangs*. Near the mouth of the gulf is the Ile de Pinarello, which is 50 m. high, and the Rochers de la Roscana, about 20 m. high.

Communications. There are no roads along this section except for the major east coast road, which in places is nearly 8 km. from the shore. It skirts the head of the Golfe de Porto-Vecchio, from which minor roads run south-west along the Stabiacco valley to Sotta and north-west over the hills to Zonza. A few minor roads and tracks run inland from the shore to join the coast road.

(17) *Golfe de Pinarello to Solenzara*

This section of the coast is relatively straight and cliffs are low. Numerous short streams with small estuaries flow at right angles into the sea. The mouth of the Cavo is almost blocked by a sandspit, behind which is the large shallow Étang de Lovo-Santo.

Communications. The east coast road follows the shore closely and is rarely more than 100 m., often much less, from the low cliffs. A few mule tracks run inland to villages in the hills.

EAST COAST

Between Solenzara and Bastia can be seen the various stages in the building of an alluvial coast; the numerous continuous deltas are the products of deposition by actively eroding torrential streams, where their currents are checked in an almost tideless sea. Longshore drift of material has produced bars and spits of sand and shingle across many of the river mouths, thus forming behind them great areas of shallow *étangs* and marshes (Fig. 10). This building out of the coastline is slow as the water deepens rapidly. Off the mouth of the Golo, however, the 50 m. contour line is not reached for over 10 km. The results of this long-continued sedimentation are seen most clearly near Aléria, where there is a plain of alluvium 15 km. wide, and at the mouth of the Golo, where it is about 10 km. wide. The coastal plain is crossed by numerous rivers which divide into multiple branches; between them are undulating hills and stagnant pools and marsh.

After the movements of subsidence which originally produced the island form, the east coast appears to have undergone various movements of uplift. As a result, several alluvial terraces at various heights can be related to successive levels of the Mediterranean Sea. Although not continuous, terraces can be traced in the plain of Aléria at heights of 15–20, 20–25, 30–40 and 66 m. The two highest levels have been remodelled by the numerous rivers.

The efforts of man have modified the topography of this lowland coast only to a very small extent. In places groves of eucalypts have been planted, and immediately south of Bastia and near Aléria networks of channels have been made to drain the mosquito-breeding swamps. This is exceptional, and the greater part of the alluvial plain is unhealthy and deserted (see p. 79).

The nature of the coast changes somewhat between the river Alesani and the Fium' Alto, where wooded ridges over 1,000 m. high approach to within 1 km. of the coast. The shoreline is low and sandy, and almost straight.

Detailed Description of the East Coast

(18) *Solenzara to River Alesani*

The mouth of the river Solenzara has been pushed towards the south by a long curved pebble-spit; the mouth of the estuary forms an anchorage for small vessels in fine weather (xxviii). To the north, the coastal plain increases in width. It is crossed in succession by the rivers Travo, Abatesco, Orbo, Tavignano and Bravone, besides numerous minor streams and distributaries. The coast is bordered by a line of sand dunes 1–5 m. high, which are continued as spits across the mouths of the rivers. Behind the sand dunes are numerous *étangs*. The Étang de Palo is 90 ha. in area, averages 2 m. (6·5 ft.) in depth, and has a very irregular outline; its floor is made of quicksands. The river Abatesco, almost closed by a sandspit 1 km. long orientated in a north-easterly direction, spreads out to form the shallow Étang de Graduggine. North of this are a number of smaller lagoons and the almost circular Étang d'Urbino, about 750 ha. in area, which is nearly cut in half by a sandspit 1,900 m. long and about 10 m. high. To the south and north of the Tavignano estuary, into which drain numerous drainage channels, are the Étangs del Sale and Diane. The latter is 570 ha. in area, and in places is over 10 m. (5 fm.) deep. Farther north, the area round the mouth of the Bravone is exceedingly marshy. The coastal plain west of the *étangs* is not flat, but undulates between 20 and 50 m., while occasional hills rise to 60 or 70 m. Between the mouths of the rivers Solenzara and Golo, a distance of some 50 km., there is no anchorage off the shelving unindented coast.

Communications. The main road and single-track railway from Solenzara to Bastia do not follow the coast closely but keep well inland, frequently at distances exceeding 10 km. from the shore, to avoid the *étangs* and marshes. Both road and railway are embanked for considerable distances and long stretches are completely straight. The main road into the interior from Aléria to Corte follows the north bank of the Tavignano. Numerous local roads ascend steeply to the villages in the hills.

(19) *River Alesani to Fium' Alto*

From Alistro the coast continues almost due north for nearly 20 km. It is bounded by a low, straight, sandy beach, and is characterized by an almost complete absence of any indentations or projections. It is crossed at frequent intervals by short torrential streams. The largest stream is the Alesani, across the mouth of which is a sandspit.

Communications. The major coast road and railway follow the shore closely. The most important road into the interior goes from the coast through Cervione, Piedicroce and Morosaglia to Ponte-Leccia. Frequent minor roads zigzag into the hills to link up the numerous settlements in the *Chataigneraie.* A minor road contours the ridges at a height of 200–300 m., almost parallel to and about 4 km. away from the coast road.

(20) *Fium' Alto to Bastia* (Fig. 10)

The hills once again recede inland. The coast plain is about 8 km. wide and is the flattest part of Corsica; most of it is under 10 m. and a large part under 5 m. above sea level (Plate 14).

The river Golo is about 200 m. wide at its mouth, it meanders considerably and has numerous sandy islands. Two drainage channels join the river to the Étang de Biguglia (Figs. 10, 11). This sheet of water is nearly 14 km. long, covers an area of about 1,800 ha. and varies in depth from 1·5 to 3 m. (5–10 ft.). It is bounded on the east by the long sandspit of Quartier Pineto and on the west by a dike. It is almost cut in half by the Ile de San Damiano, which is joined to the sandspit by an isthmus of low dunes. In the north, a narrow channel 200 m. wide gives access to the sea. There is a fair weather anchorage 1·5 km. east of the Quartier Pineto, known as the Mouillage de Pte d'Arco (xxix).

Communications. The coast road swings 8 km. inland and skirts the hills at a height of 20–40 m. The main road into the interior runs from Casamozza along the north bank of the Golo as far as Ponte-Nuovo, and thence along the south bank to Ponte-Leccia. Numerous minor roads climb the ridges to the upland villages.

At Casamozza the single-track line from Bastia to Ponte-Leccia is joined by the line along the east coast from Porto-Vecchio. The former penetrates the interior of the island by the Golo valley, following alternately the north and south sides of the river.

NOTE ON LIGHTHOUSES

The Corsican coast presents many dangers to shipping; consequently there are thirty-four lights round its shores, of which eight have a

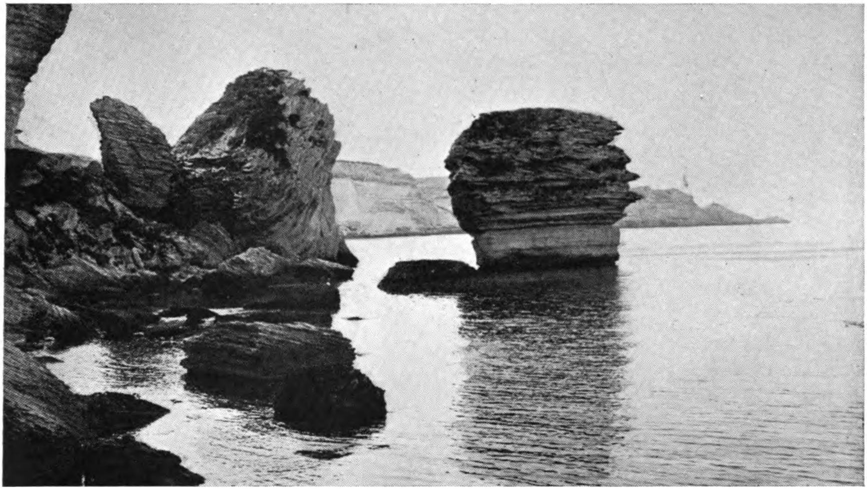


Plate 34. Limestone cliffs near Bonifacio

The level-bedded limestones are easily eroded by the waves, and form steep, often undercut, cliffs (see Fig. 21).

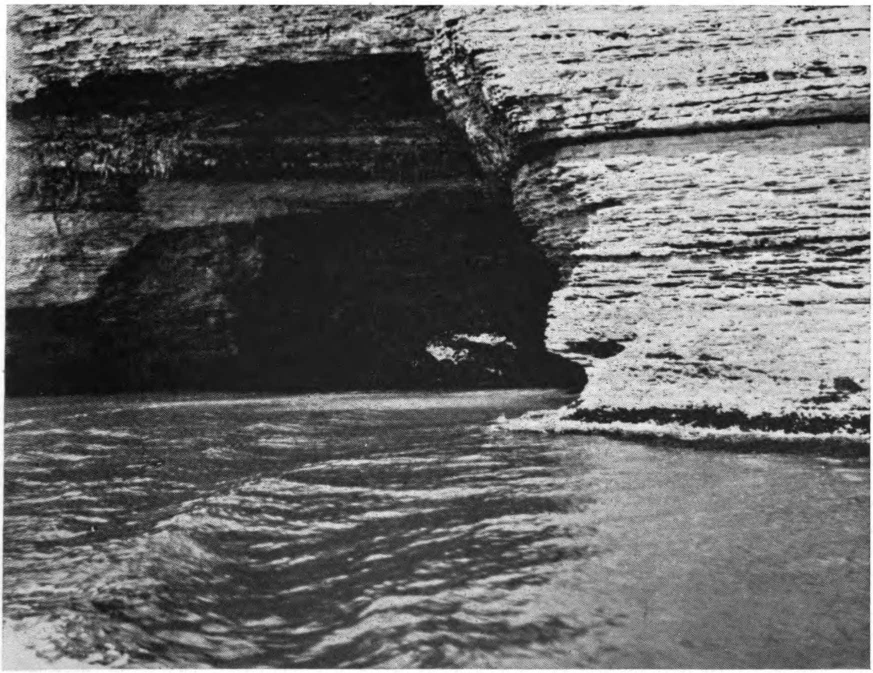


Plate 35. The entrance to the Dragonetta cavern, near Bonifacio

This is one of the most famous of 'les grottes de Bonifacio', situated near the northern shore of the entrance to the bay. They can be visited only by boat.

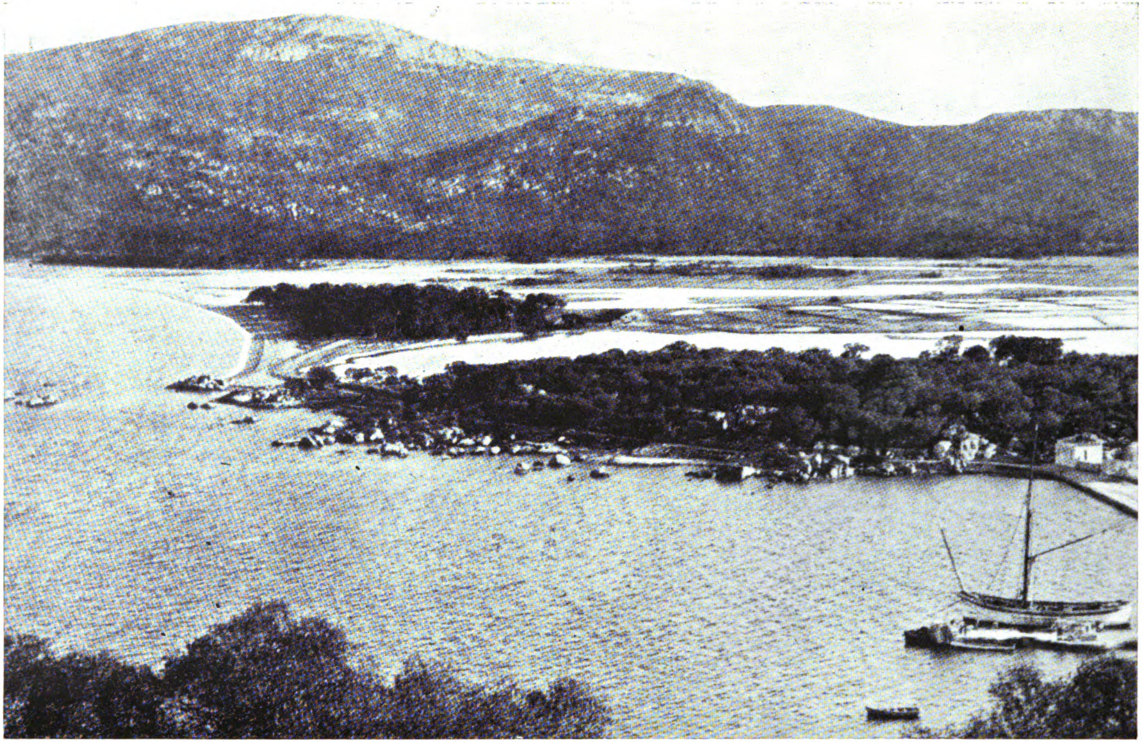


Plate 36. The head of the Golfe de Porto-Vecchio

The water at the head of the gulf is shallow, and the quay is usable only by fishing-boats. Behind the rocks and tree-covered dunes can be seen the extensive area of *salines*. The small walled town of Porto-Vecchio, built on a hill, lies just off the photograph about 50 m. west of the quay (see Fig. 63).

visibility of over 15 nautical miles (28 km.) in clear weather. The most essential lights were first established in the middle of last century; three were built in 1844 (Cap Pertusato, Pte de Revellata and Iles Sanguinaires), followed by Pte de Chiappa in 1845, and the Cap Corse light on the Ile de la Giraglia in 1848. By 1911 the coast was almost completely served by lights; only one has been added since then, Capo di Muro in 1927, although a number of short-range pilot lights have been erected on new port works. Nearly all the old lights have been replaced since 1920 by modern structures. Two of them, Pte de Chiappa and Capo Senetosa, were equipped in 1936 with radio to broadcast fog signals.

Other services include lifeboat stations at Bastia, Bonifacio, Ajaccio and St Florent, with rocket-throwing apparatus at each of these places and also at Calvi.

Supervision and maintenance of French lighthouses is one of the 'Services speciaux' of the *Département des Ponts et Chaussées*, a department under the *Ministére des Travaux Publics*. Corsica forms the 14*ième Inspection Générale*, at the head of which is the chief engineer of the port of Ajaccio.

Chapter IV

CLIMATE

General Factors: Pressure and Winds: Temperature: Visibility: Clouds: Rainfall: Snowfall: Summary

General Factors

Three main factors are responsible for the climate of Corsica:

(1) Its position at approximately 43° N latitude in the centre of the western Mediterranean basin. This sea is a zone of seasonal change of pressure and winds. It is characterized in winter by a succession of low-pressure systems moving eastward between the high-pressure areas over central Europe and north Africa. In summer it comes under the influence of the mid-latitude high-pressure belt, which is characterized by fine weather with either calms or northerly winds. But surrounded by mountain ranges, with a great hot desert to the south and a continent to the north with extreme ranges of temperature, it is clear that a variety of influences may operate at any time.

(2) The insular position has several modifying effects; the two most marked are an amelioration of summer temperatures round the coast, and local diurnal changes of temperature and pressure which frequently cause land and sea breezes.

(3) A large proportion of the surface is mountainous. This causes a decrease of temperature with altitude, emphasizes the contrasts due to aspect, and increases precipitation on windward slopes. It may thus be said that the climatic regions are concentric altitudinal zones.

Pressure and Winds

The major influence in the winter climate of Corsica is a trough of low pressure extending the whole length of the Mediterranean Sea. Within this are individual areas of lower pressure, such as that over Corsica and Sardinia (Fig. 22), separated by tongues of slightly higher pressure over the Iberian, Italian and Balkan peninsulas. This low pressure is due partly to the temperatures over the sea, which is relatively warm compared with the cold continent to the north, and partly to the depressions which move eastwards from the Atlantic. They pause for varying lengths of time, sometimes deepening in the neighbourhood of the Gulf of Genoa. Corsica in particular is affected by depressions which tend to follow three main tracks. Some move in a north-easterly direction across the western Mediterranean between south-east Spain and Sicily towards the Gulf of Lions and the central Adriatic; some originate in the Gulf of Lions, then pass north of Corsica across Italy and the Adriatic; others travel across northern Spain, then across southern Corsica or northern Sardinia.

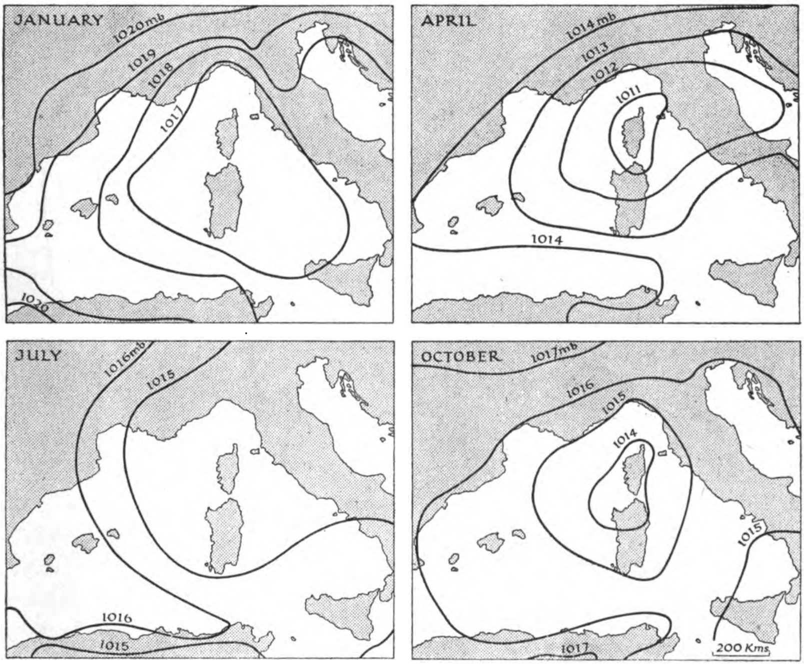


Fig. 22. Mean seasonal pressure distribution (reduced to sea level) in the western Mediterranean region

Based on *Weather in the Mediterranean*, vol. II, part 6, p. 6 (H.M.S.O., London, 1936).

The winds have a general westerly or south-westerly component in the southern part of the low-pressure system, and a north-easterly one in the northern part. The passage of a depression thus causes successive changes of wind direction. Fig. 23 illustrates the winds affecting Corsica as a result of a disturbance which moved in a north-easterly direction across the island. While the depression was south-west of Corsica, the winds were dominantly north-east; at a

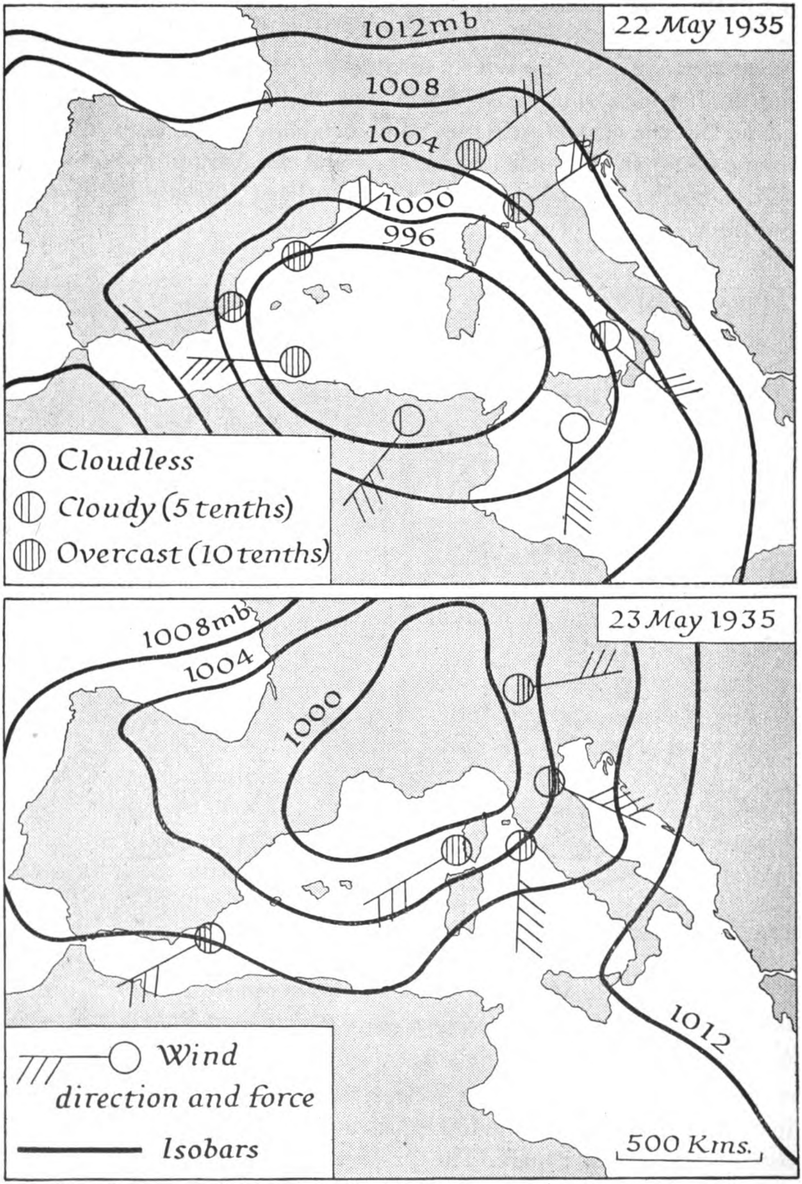


Fig. 23. Passage of a depression in the western Mediterranean region

A depression to the south or west of Corsica causes easterly winds and rain on the east coast; a depression to the east or north causes westerly winds and rain on the west coast.

Based on *Weather in the Mediterranean*, vol. 1, Figs. 61, 62 (H.M.S.O., London, 1937).

later stage the main centre had shifted north of the island and the winds then changed round to south-west. Winter winds, therefore, blow from two main directions, according to whether pressure is lower to the east or to the west of the island. These two directions are from between north-west and south-west and from between north-east and east.

In summer the continental low-pressure area extends over the eastern Mediterranean and over the Sahara, while the mid-latitude high-pressure belt extends over south-western Europe. The isobars tend to run north-south in the western Mediterranean (Fig. 22). Occasional feeble depressions may penetrate as far as Corsica, but these are uncommon. The summer winds differ very little in direction from those at other times of the year, although their characteristics are different. Local causes may modify the wind at any time and place, and even play a dominant part in determining its direction. The most important local causes are:

(1) *The Nature of the Relief.* The wind-rose maps (Fig. 24) illustrate the difference between the winds experienced at Cap Pertusato on the one hand and Cap Corse and Sanguinaires on the other. At Cap Pertusato, which is situated between mountainous areas to the north and south, winds blow mainly from western and north-eastern directions. At the other two relatively exposed stations winds are experienced from all directions, although less marked at Cap Corse from the southern land side. The western and eastern directions are, however, still dominant. The wind-roses, in fact, illustrate how similar the winds are at each season of the year, because the seasonal changes of pressure are overborne by local influences. Another climatic effect of the relief is experienced on the east coast of Cap Corse; the westerly winds cross the peninsula and descend by the valleys opening on to the east coast as hot desiccating squalls (*raggiature*).

(2) *Diurnal Periodic Changes.* Local conditions cause alternate land and sea breezes, which sometimes attain considerable force (see p. 55).

Gales

The wind-roses show that gales (i.e. winds of Beaufort Force 7 or over, representing a speed greater than 27 knots) are most frequent from October to April, chiefly from between north-west and west, but also less commonly from other directions. Strong easterly gales may blow through the Straits of Bonifacio when a depression passes to the south.

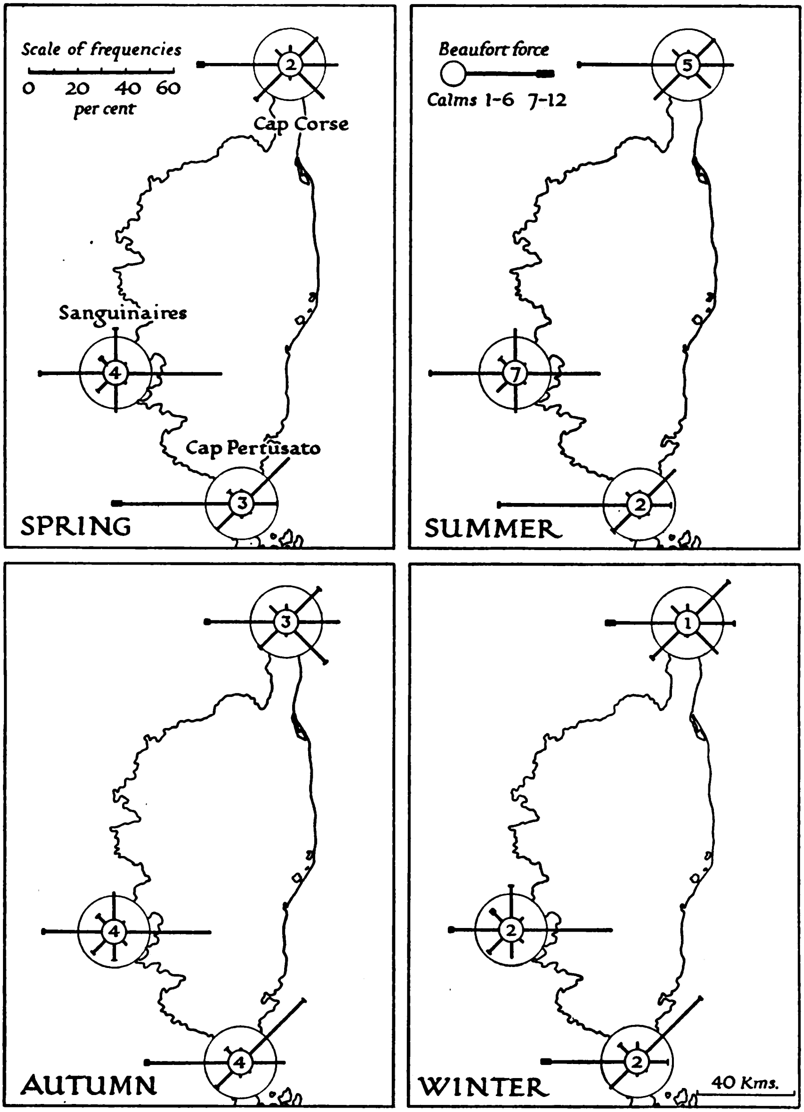


Fig. 24. Frequency and force of seasonal winds at three Corsican stations

The months were grouped as follows: spring (March–May), summer (June–Aug.), autumn (Sept.–Nov.), and winter (Dec.–Feb.).

Based on *Weather in the Mediterranean*, vol. II, part 2, p. 65; part 4, p. 48; and part 5, p. 76 (H.M.S.O., London, 1936). Observations at 0700, 1200, and 2000 G.M.T. for period 1899–1908.

The three summer months are almost completely free from gales, although short-lived squalls may occur. The striking difference between the number of gales in each season is summarized in the following table (short-term figures, 1891–97):

Number of Observations of Beaufort Force 7 and over per season at Sanguinaires

	N	NE	E	SE	S	SW	W	NW	Total
Winter (Dec.–Feb.)	2·3	0·1	1·3	0·1	—	0·6	4·9	5·4	15
Summer (June–Aug.)	0·3	—	—	—	—	—	0·9	0·9	2

Source: *Weather in the Mediterranean*, vol. II, part 2, p. 38 (H.M.S.O., London, 1936).

Land and Sea Breezes

These may blow at any time of the year during fine weather, but they do so most regularly in summer. In March a distinct reversal may be noticed on about 4 days out of 10, in mid-July on about 9 days out of 10; the change practically ceases by the end of October. The land breeze or *muntese*, noticeable from about 0100 to 0800 hr., is due to the slightly higher pressure over the land caused by radiation cooling, resulting in a drift of cool heavier air down the slopes. The setting in and cessation of the sea breeze is preceded by a short calm, which is usually longer in the evening. The sea breeze reaches its inland limit, which varies according to the nature of the relief of the hinterland, by the late afternoon. It is generally stronger than the land wind, except where the land slopes steeply to the sea.

Local Winds

There are a number of winds in the Mediterranean which have received special names; they are associated with some particular distribution of pressure and have certain definite features. Fig. 25 illustrates the regions of the west Mediterranean where these winds are a striking feature. Several of them may be experienced at the same place at different times of year. At Ajaccio, for example, the following winds may occur:

Name	Direction	Features
Tramontana (or *tramontane*)	N to NE	Cold and bitter
Gregale	NE	Cold and showery
Levante	E	Mild and humid
Scirocco (or *sirocco*)	SE to SW	Hot and oppressive
Libeccio	W to SW	Boisterous and invigorating
Ponente	W	Dry and healthy
Maestrale (or *mistral*)	NW	Cold and blustering

The winds which notably affect Corsica are the *libeccio*, the *tramontana*, the *scirocco* and to a less extent the *maestrale*.

The *libeccio* is a dominant wind, and has its maximum frequency in summer. The east coast is protected from it by mountains, except in Cap Corse. In winter the winds are associated with the passage of a depression and they bring rain to the west coast. In summer they are dry and invigorating, although when they blow over the narrow Cap Corse they reach the east coast as hot desiccating squalls.

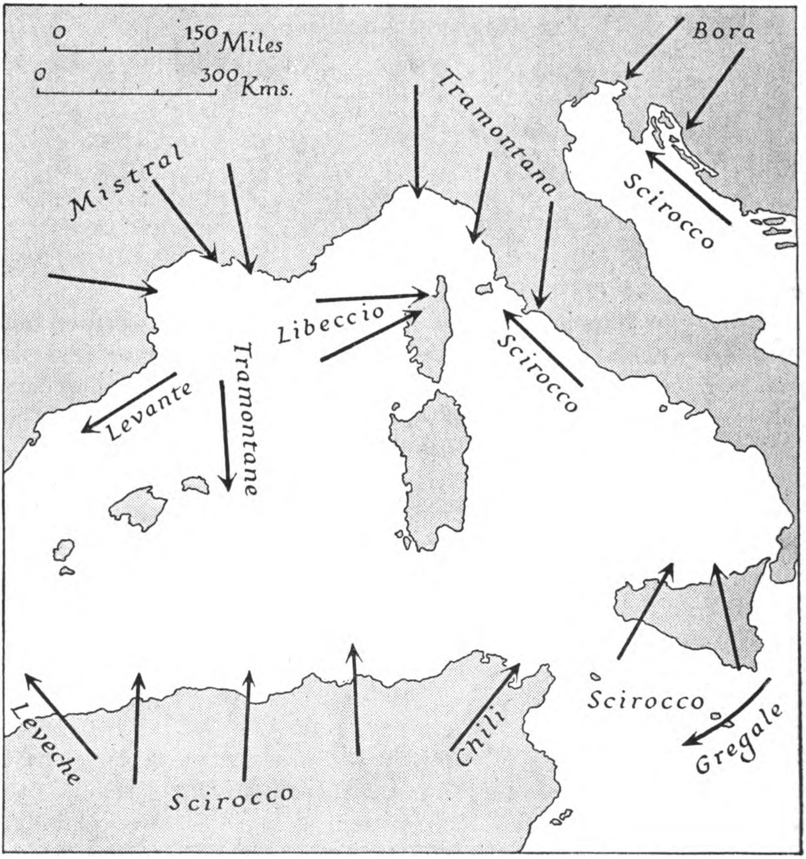


Fig. 25. Local winds in the western Mediterranean region

The names and directions of the most important local winds are given. No attempt is made to indicate their seasonal distribution.

Based on *Weather in the Mediterranean*, vol. 1, p. 45 (H.M.S.O., London, 1937).

The *tramontana* blows from between north and north-east, and succeeds the *libeccio* as a depression passes. It brings rain to the east coast, and snow may fall on the mountains in winter.

The *scirocco* occurs in front of a winter depression, as an inflow of warm air which originates in the Sahara; its humidity is raised during its passage over the Mediterranean. The wind blows between south-west and south-east and may bring heavy rain on the west coast. The combination of heat and humidity makes it exceedingly enervating; in Sardinia it is known as the *maladetta levante.*

The name is frequently applied to a hot, dry, sand-laden wind which blows in summer from a southerly direction.

The *maestrale* or *mistral* is chiefly felt in the neighbourhood of the Rhône delta, but it is also experienced on the west coast of Corsica as a north-west wind. It blows in winter when there is a depression over the Gulf of Genoa. At that season the weather is at times cold and dry, although not as markedly so as in southern France; usually the sky is cloudless, but sometimes sharp showers may occur, with hail or snow at higher levels.

State of the Sea

Rough seas off a coast are closely related to the strength of the wind, to its direction (whether on- or off-shore), to the length of its uninterrupted progress over the sea, and to the exposure of the point of observation. Swell may often be experienced at stations before the arrival of the strong winds to which it is due, and may persist after the cessation of the wind.

Annual data for Cap Pertusato are available for the period 1899–1908, and are summarized in the following table, which relates the state of the sea to the wind direction:

Average number of days per year

	N	NE	E	SE	S	SW	W	NW	Total
Very rough	—	1	1	—	—	1	12	1	16
Rough	—	—	—	—	—	—	1	1	2
Heavy swell	—	4	1	—	—	4	20	2	31
Swell	—	9	3	1	1	7	31	3	55

Source: *Weather in the Mediterranean,* vol. II, part 5, p. 67 (H.M.S.O., London, 1936).

It is noteworthy that these figures show clearly the effects of the exposure of the Straits of Bonifacio to winds from a westerly and to a much less extent from a north-easterly direction, while there is complete shelter from north and south. Heavy seas are common along the west coast of Corsica in winter, hence the inadequacy of shelter provided by the wide gulfs. Occasional strong east winds cause heavy seas on the east coast in winter; they are especially feared because of the lack of shelter. The seas round Corsica in summer are generally calm.

TEMPERATURE

The main factors affecting the temperature of any place are latitude, altitude, distance from the sea, and local features, notably shelter from or exposure to cool or warm breezes, and aspect.

Owing to Corsica's relatively small area, its sea-level temperatures differ little from those of the west Mediterranean basin generally; that is, the average January temperature is about 8–10° C., while the average July temperature is about 22–25° C. (Fig. 26). The only station with full temperature records of comparative length is Ajaccio (1851–1917), as follows:

	Monthly mean		Mean of		Mean of		Extreme records	
	°C.	°F.	Daily max. °C.	Daily min. °C.	Absolute monthly max. °C.	Absolute monthly min. °C.	Max. °C.	Min. °C.
Jan.	9·4	49	13·8	6·1	17·7	0	19·4	−3·8
Feb.	10·0	50	14·4	6·1	17·7	−0·5	21·6	−2·7
Mar.	10·5	51	16·1	7·2	21·6	2·2	26·1	0·5
Apr.	13·8	57	18·3	8·8	23·8	5·0	30·0	2·2
May	16·6	62	21·1	12·7	27·2	7·7	32·7	3·3
June	20·5	69	25·5	16·1	32·2	11·6	36·1	7·2
July	23·3	74	28·3	18·8	34·4	15·0	36·1	8·3
Aug.	23·8	75	29·4	20·0	34·4	16·1	37·2	10·0
Sept.	21·1	70	26·6	17·2	30·5	12·2	35·0	7·2
Oct.	17·2	63	22·2	13·3	27·2	8·8	30·0	5·0
Nov.	13·3	56	18·3	9·4	22·7	5·5	25·0	3·8
Dec.	10·5	51	14·4	6·6	19·4	2·7	22·7	0·5
Mean	16·1	60	20·5	11·6				

Source: *Weather in the Mediterranean*, vol. II, part 2, p. 94 (H.M.S.O., London, 1936).

Summary figures only are available for Cap Corse and Cap Pertusato:

Mean monthly temperature (°C.)

	J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.	Mean
Cap Corse	8·5	9·0	10·6	12·9	16·5	20·7	23·6	24·0	21·1	18·2	13·6	10·4	15·5
Cap Pertusato	9·4	9·2	11·0	13·0	16·9	20·5	23·7	24·5	21·8	17·8	13·2	10·6	16·0

Source: *Instructions Nautiques: Mer Méditerranée—France* (*Côte Sud et Corse, etc.*), p. 3 (Paris, 1932).

Although no figures are available for Bastia, it is more exposed to easterly winds and is likely to be cooler in the day-time. On the whole, the average coastal temperatures are much more like the Tuscan than the Riviera coast; the temperatures are rather higher in winter and rather lower in summer than the latter. The summer day temperatures are often modified by a cool sea breeze. In winter at Ajaccio there is a daily range of about 8° C. and in summer about 10° C. That such a marked range does take place even on the coast where the equable effect of the sea is felt is due largely to the clear skies which promote rapid heating by day and cooling by radiation at night.

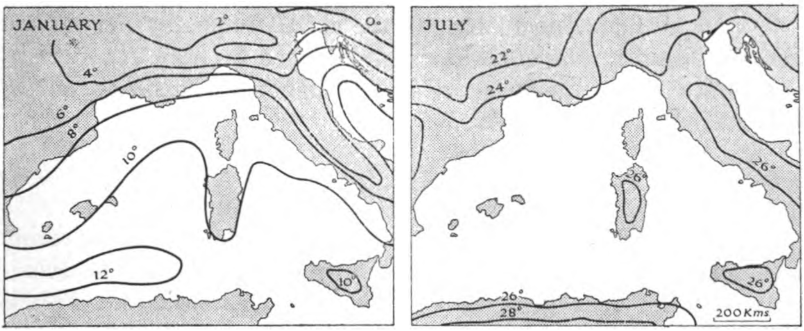


Fig. 26. Isotherms for January and July (reduced to sea-level) in the western Mediterranean region

Based on E. Alt, *Handbuch der Klimatologie. Mittel und Süd Europa*, vol. III, Part M, pp. 43–4 (Berlin, 1930).

The effects of altitude can be estimated by assuming a decrease in temperature of approximately 1° C. for each 200 m. of altitude. The mountainous areas over 2,000 m. have mean temperatures in the winter months below freezing, and snow lies for considerable periods.

Local factors produce considerable differences from these average conditions. The onset of the *scirocco* may raise temperatures 5° C. or more in a few hours, while the *raggiature* may cause an even greater rise of temperature on the east coast of Cap Corse. On the other hand, the onset of the *maestrale* or *tramontana* may produce a considerable fall of temperature, with snow on the mountains and even occasionally at sea level. The inland valleys may become hotter in summer because they are farther from maritime influences, but in winter cold air drains downwards from the snow-covered mountains; as a result the valleys often become colder than the higher slopes (inversion of temperature).

VISIBILITY

No detailed data of visibility are available for Corsican stations. Mediterranean skies are as a rule clear and the total of hours of sunshine is high. Both land fogs, due to the cooling of moist calm air by radiation on clear nights, and sea fogs, due to warm moist air drifting over a cooler sea surface, occur, but they are infrequent. In winter, land fogs occur on calm early mornings, but disperse soon after sunrise; sea fogs of longer duration may occur off the west coast when the moist warm *scirocco* blows. In early summer mornings sea fogs occur in the Straits of Bonifacio and off the west coast.

Owing to the summer drought, the air is frequently very dusty and the visibility may be considerably reduced by haze. A heat haze sometimes forms over the sea when very light hot winds move north; it is attributed to minute salt particles.

CLOUDS

The Mediterranean coasts are characterized by clear skies and sunny weather, even during winter. Corsica, however, tends to be somewhat cloudier than other parts of the west Mediterranean. This is due largely to the mountainous nature of the island which forces moist sea breezes to ascend sharply. Cloudiness is greatest during the winter months, but even then there are long periods of clear skies and sunshine. When rain-bearing winds are blowing, the centre of the island may have a continuous cover of stratus or strato-cumulus type, known locally as *balles de coton.* In summer low light stratus clouds form in the early morning, in the afternoon there are light cumulus clouds (occasionally developing into thunder clouds), while in the evening the sky clears.

The mean monthly cloud amounts, in tenths of the sky covered, at three stations, are as follows (period of observation not known):

Station	Spring (March–May)	Summer (June–Aug.)	Autumn (Sept.–Nov.)	Winter (Dec.–Feb.)	Year
Cap Corse	5	6	4	4	4·7
Sanguinaires	6	6	6	6	6·0
Cap Pertusato	5	6	4	4	4·7

(0 = clear sky, 10 = completely cloud-covered)

Source: *Instructions Nautiques: Mer Méditerranée—France* (*Côte Sud et Corse, etc.*), p. 21 (Paris, 1932).

RAINFALL

Corsica, like all Mediterranean areas, has a well-marked autumn and winter rainfall maximum, while the summers are dry, though not entirely so. The winter winds are warm and moist, the summer winds are not only lighter but drier, with less tendency to cloud formation.

Rain-bearing winds in winter blow towards both the east and west coasts, varying according to the position of a neighbouring depression. Heavy rain on the east coast brought by winds in the north-east sector of a depression may be succeeded on the following day by equally heavy rain on the west coast (Fig. 23).

The seasonal distribution (Fig. 27) shows very markedly the dry summer season (June to August). It is not entirely dry, as 119 mm. fall on an average at Vico and 163 mm. at Vizzavone during the three summer months, but the minimum is accentuated at the southern stations. The maximum occurs as a rule in autumn, although certain localities experience it in winter. The cessation of the winter rains is later than in other lands in the Mediterranean, and the spring months show appreciable totals.

With the exception of the narrow promontory of Cap Corse, rainfall totals decrease along both coasts from north to south, typical of the Mediterranean lands. The east coast is wetter than the west; this is contrary to the usual arrangement in the Mediterranean, where the west coasts of peninsulas such as Italy and the Balkans are markedly wetter than the east. There is, however, no satisfactory explanation. In detail the amount of annual precipitation is closely related to the height of the land (Fig. 28). Corsica rises steeply to heights of over 2,000 m. in less than 25 km. from the west coast, while although in the east there is a coast plain the land rises beyond it to over 1,000 m. Thus Corsica has a considerably higher general rainfall than most of the other lands round the western Mediterranean (cf. the total figures on Fig. 27 with Marseilles 574 mm., Cartagena 379 mm., and Cagliari 449 mm. Peninsular Italy is nearly as wet because it, too, rises steeply from the sea; cf. Leghorn 883 mm., Naples 848 mm.).

The two main areas of heavy rainfall can be seen from Fig. 28; the major one corresponds closely to the mountainous region over 1,500 m. in altitude, while the second occurs in the uplands of the *Chataigneraie*. Between them is the 'Central Furrow', a rain-shadow area to both westerly and easterly winds. However, this effect is not considerable (Corte, 782 mm.), as the winds have not crossed any great extent of high land. The west coast valleys,

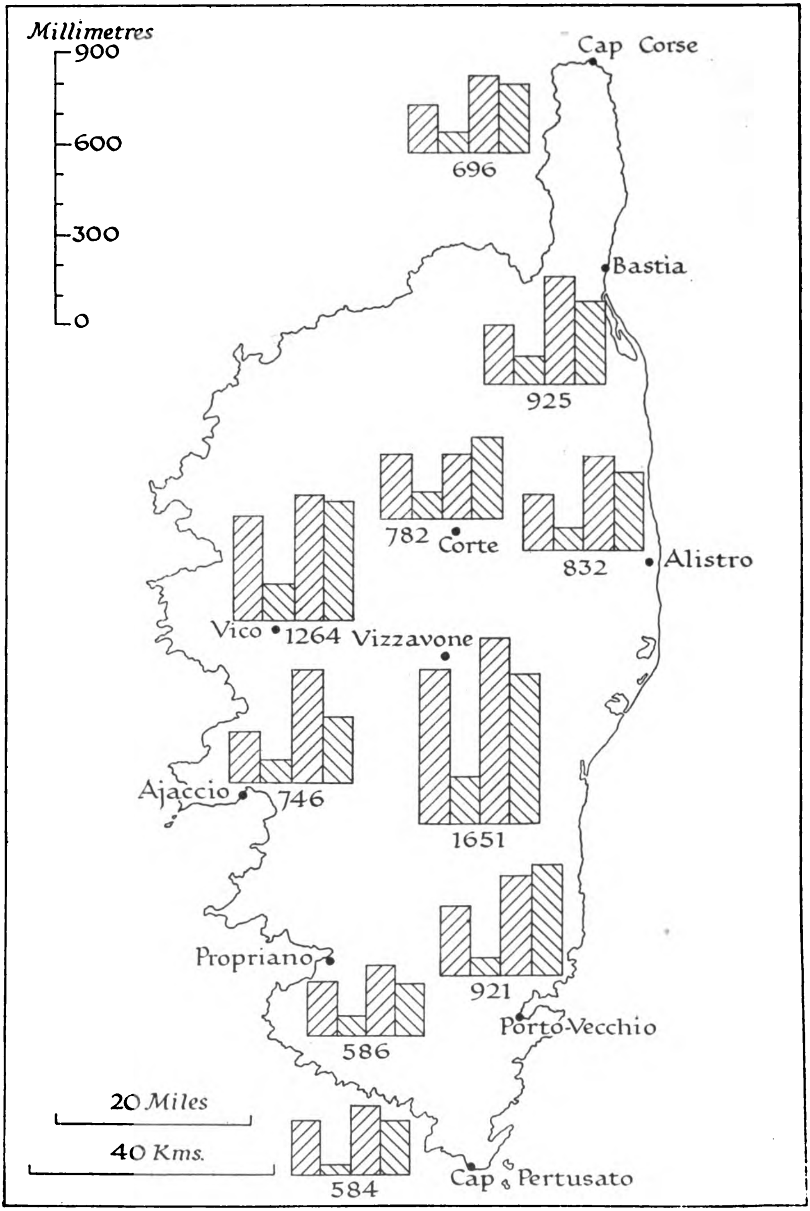


Fig. 27. Seasonal rainfall

The vertical columns from left to right represent the totals during spring (March–May), summer (June–Aug.), autumn (Sept.–Nov.) and winter (Dec.–Feb.). The figures are the total mean annual rainfall in millimetres (period of observation not known).

Based on figures from *Enciclopedia Italiana*, vol. XI, p. 508 (Milan, 1931).

orientated north-east to south-west, allow the moist westerlies to penetrate a considerable distance, and rainfall increases rapidly up to the summit ridges, especially where the valleys are funnel-shaped. Vizzavone, for example, about 35 km. up the Gravone valley at a height of 1,162 m., has 1,651 mm., and is the wettest recorded place in the island.

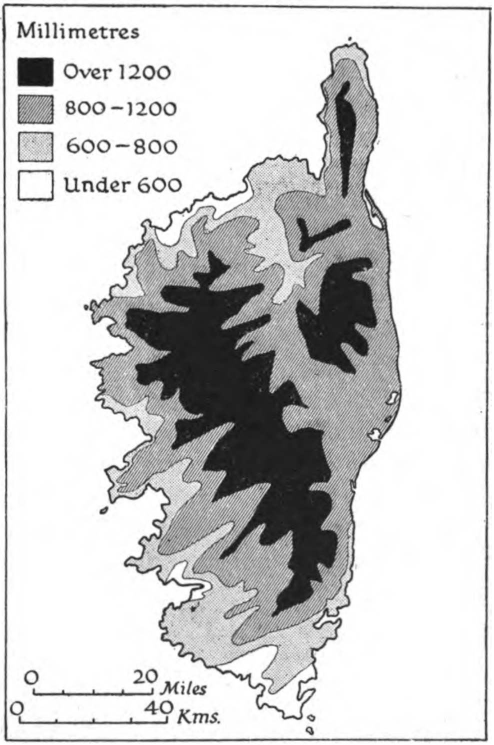


Fig. 28. Mean annual distribution of rainfall

Based on E. Bénévent, 'La Pluviosité de la Corse' in *Revue de Géographie Alpine*, vol. II, p. 239 (Grenoble, 1914).

Frequency and Intensity of Rain

Seasonal statistics of rain days are available for three coastal stations, as follows:

Station	J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.	Year
Cap Corse	6	7	7	6	5	4	1	1	4	8	8	9	66
Sanguinaires	6	6	6	5	5	3	1	1	5	9	8	8	63
Cap Pertusato	7	7	7	6	5	3	1	1	4	9	10	9	69

Source: *Instructions Nautiques: Mer Méditerranée—France* (*Côte Sud et Corse, etc.*), p. 24 (Paris, 1932).

In addition to these three stations, figures for the year only are available for a number of other places. The total number of rain days increases towards the interior (84 at Ajaccio, 104 at Calacuccia and 118 at Vizzavone), and decreases towards the south (97 at Vico, 71 at Bonifacio). There are fewer rain days on the east coast than on the west (Bastia 72 days), although totals are greater on the east. The north-west winds bring heavier and more sustained showers, while the south-west winds usually bring a fine drizzle, succeeded by continuous rain. The autumn rains in September and October, as well as the scanty summer rains, fall in heavy showers, sometimes of a thunder type. Winter rains are generally lighter than those of autumn, and in both seasons long periods of continuous rain are unusual. There is great variability from year to year and from place to place.

It must be remembered that the effectiveness of rainfall varies considerably. The short-lived summer rains and to a less extent those of autumn are rapidly absorbed by the dry dusty ground or evaporated.

Thunderstorms

The frequency of thunderstorms is extremely variable; from the limited data available at three coastal stations (period 1899–1908) it seems that there are about twenty storms per annum on the east coast and about half as many on the west. The following table gives for these stations the average number of days when thunderstorms occurred or thunder was heard:

	J.	F.	M.	A.	M.	J.	J.	A.	S.	O.	N.	D.	Total
Cap Corse	1·5	1·6	1·4	1·5	1·7	2·1	1·7	2·7	4·3	4·0	1·7	1·7	26
Sanguinaires	0·1	0·4	0·7	0·5	0·5	0·3	0·9	1·3	1·8	1·9	1·3	0·9	10·4
Cap Pertusato	0·7	0·7	0·8	0·8	1·2	1·4	1·4	1·7	2·4	4·0	2·2	1·0	18

Source: *Weather in the Mediterranean*, vol. II, part 5, p. 73 (Cap Corse and Cap Pertusato), and part 2, p. 60 (Sanguinaires) (H.M.S.O., London, 1936).

It is likely that figures for inland stations would reveal much higher totals.

Winter thunderstorms are few in number and are associated with the passage of the cold front of a depression. The heat thunderstorms due to convectional instability are a feature of the late spring and early summer, chiefly in inland regions, while occasional ones in summer are associated with minor depressions. On the whole thunderstorms are most common during September and October when depressions increase in frequency. The thunderstorms of winter and spring are often accompanied by violent showers of hail; these may, however, occur at any time, and sometimes great damage is done to the vines in July and August.

SNOWFALL

Snowfall in Corsica occurs at and behind the fronts of incursions of cold air which have originated over the continent to the north-east. The snow-bringing wind is chiefly the *tramontana* from a north-easterly direction. Snow may occur during any of the months between November and April, and more commonly between December and March. At sea level it averages about two days a year, but sometimes several years may pass without a fall. Average figures of daily snowfall at sea level are as follows:

	Jan.	Feb.	Mar.	Apr.	May to Nov.	Dec.	Total
Cap Corse	0·9	0·9	0·3	0·1	—	0·3	2·5
Sanguinaires	0·1	0·2	0·2	—	—	—	0·5
Cap Pertusato	0·8	1·1	0·2	—	—	0·2	2·3

Source: *Weather in the Mediterranean*, vol. II, part 2, p. 54 (H.M.SO., London, 1936).

Snow-cover is very variable in the mountains, and depends largely on altitude, angle of slope and aspect. The faces and ridges of some of the highest peaks have virtually no snow because of their steepness, while north-facing cirques and gullies have usually abundant snow, which may lie long into the summer (Plates 4–7, 9, 10). North of Pta Minuta is the deeply cut Kessel von Trinbolaccia, a basin encircled by high peaks, which contains a small patch of permanent snow, the only example in the island. As a general rule, the snow-line lies at about 1,500 m. until the beginning of April in the northern part of the island, but there are considerable variations from place to place and from season to season; it rises to about 2,000 m. in May and disappears altogether in summer. During February and March it forms a thick sheet over the *maquis* (see pp. 72–3), and rivers often flow in tunnels under the surface. Cols above 1,000 m. may be blocked for many weeks. The snow disappears very rapidly, especially when a warm west or south-west wind sets in, and avalanches may occur as half-melted masses slide down the slopes. In 1934, for example, several villages in the high valleys were destroyed.

SUMMARY

The climate of Corsica is thus typical of the Mediterranean areas generally; it has a clearly marked seasonal change between a relatively dry sunny summer and a warm winter with some rain, modified by its insularity and over much of its extent by altitude.

The altitudinal effects may be summarized as follows:

(1) From sea level to 200 m. a true Mediterranean climate prevails with hot summers and warm winters, the rain falling chiefly in autumn but also in winter and spring. The warmth of midsummer is modified by the alternation of land and sea breezes.

(2) From 200 to 900 m. the climate is temperate and pleasant. The summers are cooler and the period of drought is shorter than at the coast.

(3) From 900 to 1,500 m. winters are cold, while summers are warm and sunny; rain or snow may occur at all seasons, although the summer precipitation minimum is still marked.

(4) Above 1,500 m. is an alpine region, which has a cold, even severe, winter, with heavy rain and snow. The hills are snow-covered until after the middle of May. The summers are warm and have long hours of sunshine.

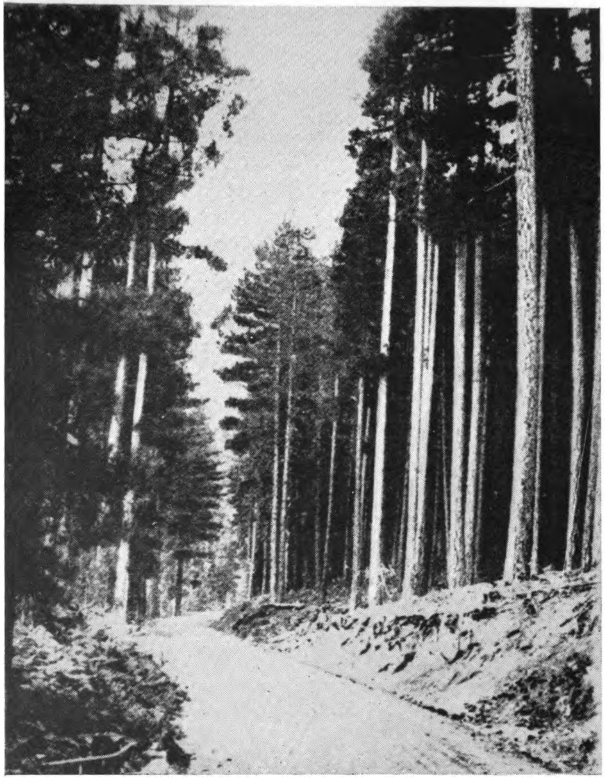


Plate 37. Forêt de Valdo-niello

This forest of Corsican pine covers the southern slopes of the upper Golo valley. The road is a *route forestière* (see p. 141).

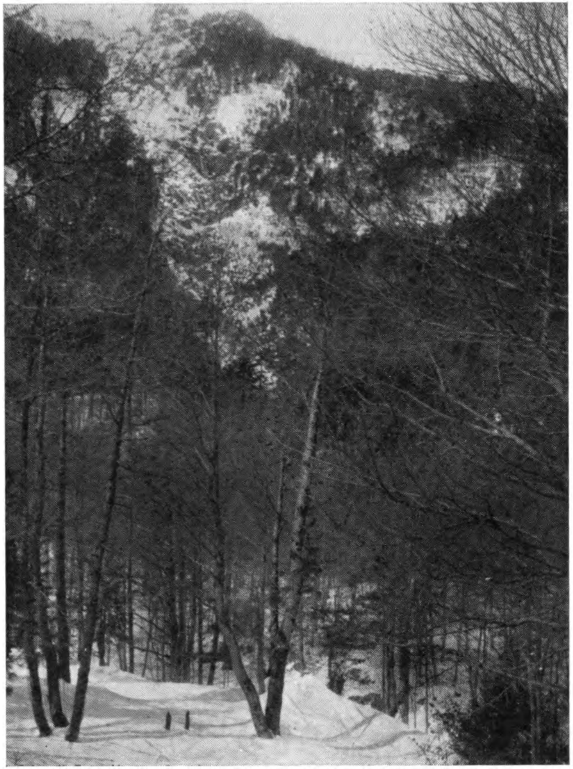


Plate 38. Forêt de Vizzavone

Photograph taken from the train at Vizzavone in mid-March. In the foreground is a young beechwood, with an undergrowth of holly; behind rise the snowy pine-clad slopes of Mt d'Oro.

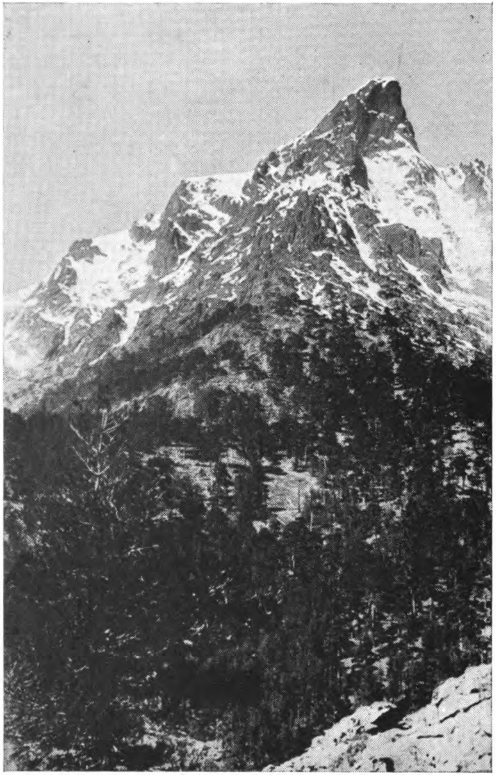


Plate 39. The eastern slopes of Paglia Orba

The Viro valley is extensively wooded with Corsican pine. The trees thin out considerably on the higher slopes; the upper tree limit is in this case at about 1,800 m.

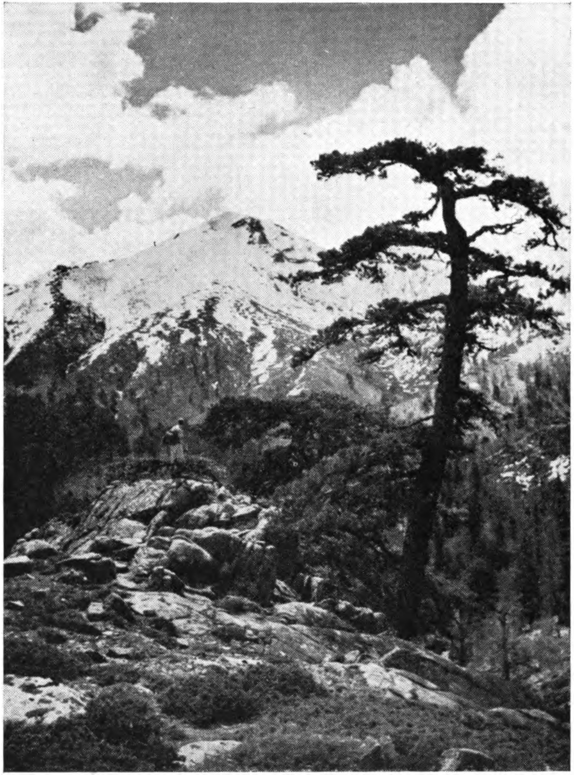


Plate 40. Mt Tozzo

Photograph of Mt Tozzo (2,099 m.) taken from near the Col de Vergio in mid-April. The Forêt de Valdo-niello (left) thins out above 1,500 m. and is replaced by isolated trees and sub-alpine scrub.

Chapter V

FLORA AND FAUNA

General Features: Woodland: *Maquis*: Pasture: Alpine Vegetation: Swamp Vegetation: Fauna

GENERAL FEATURES

The hot almost dry summer experienced over the greater part of Corsica causes the predominant types of vegetation to be *xerophytic*, that is, adapted to withstand drought. The mountainous nature of the island, however, introduces considerable variety: (1) Changes of temperature due to height above sea level result in a flora which varies from tropical and sub-tropical species, such as palms, mimosa and prickly pear, to cool temperate or even alpine types. For the same reason, the advent of the seasons is retarded by increasing altitude, and while spring blossoming takes place at sea level in March, it may be as late as May above 1,000 m. (2) The increased rainfall due to the mountains allows a considerable forest cover to flourish; most trees are evergreen, although the chestnut is an exception. (3) Aspect introduces great local differences; for example, grass occurs quite abundantly on the shady slopes, but hardly at all on the sunny slopes, lentisk and myrtle are found on southern slopes at considerable elevations but are absent on the northern slopes, and laurestinus is common on the north side, absent on the south side of ridges. (4) Much of the island is formed of crystalline rocks, and the bare granites with their thin cover of poor soil can support only impoverished vegetation forms.

The marked seasonal climatic changes produce a contrast between the fresh green landscape of winter and spring, the widespread flowers of spring and early summer, and the brown dusty aspect of late summer; these contrasts are less striking at higher altitudes.

It is interesting to note that although Corsica and the other Tyrrhenian islands have a flora revealing much affinity with that of the Italian mainland and of the Mediterranean region generally, many species of plants, estimated to number about 170, are peculiar to this group of islands. Some sixty species are strictly endemic in Corsica, while a further thirty-seven occur both in Corsica and in Sardinia. Most of the first sixty species are either sub-alpine or alpine. This high degree of endemism is found elsewhere in the Mediterranean region only in Crete. It is due to the fact that the Tyrrhenian islands were separated from the mainland for a long period of geological time; the separation of Corsica and Sardinia took place very much later (see p. 6), which accounts for the thirty-seven species common to both islands.

The chief types of vegetation consist broadly of (1) woodland, (2) the *maquis* or *macchia*, a type of scrub, (3) pasture, (4) alpine vegetation, and (5) swamp vegetation.

WOODLAND

Corsica had in 1938 about 175,000 ha. of forest and an additional 41,000 ha. of copse and brushwood; that is, about one-quarter of the total area of the island was wooded. Chestnut woods and olives are included in these figures, but the areas of vines and citrus fruits, totalling an additional 33,000 ha, are not included.

The total area of woodland has decreased steadily, and that which remains is the remnants of a once almost complete forest cover. This is due to extensive cutting for constructional timber and for charcoal (see p. 130), to disastrous fires, and to destruction by avalanches, with the complementary cause of inadequate reafforestation schemes. Large areas of forest have thus been replaced by a secondary scrub vegetation.

The forest areas are owned:

	Hectares
By the state	46,778
By the department	—
By the communes	98,607
By private individuals	29,998
	175,383

Source: *Statistique Agricole Annuelle* (1938) (Paris, 1939).

The wooded areas are fairly widespread (Fig. 29), but there are four large individual forests. These are the forests of Valdo-niello (4,435 ha.) (Plate 37), Ghisoni (4,068 ha.), Aïtone (1,674 ha.) and Vizzavone (1,535 ha.) (Plate 38).

The distribution of dominant species of trees corresponds closely to altitude (see p. 66). Three dominant tree zones may be distinguished:

(1) Up to 600 m., although higher in favourable areas, are found the evergreen oak (*Quercus Ilex*), the cork oak (*Q. suber*) (Fig. 30),

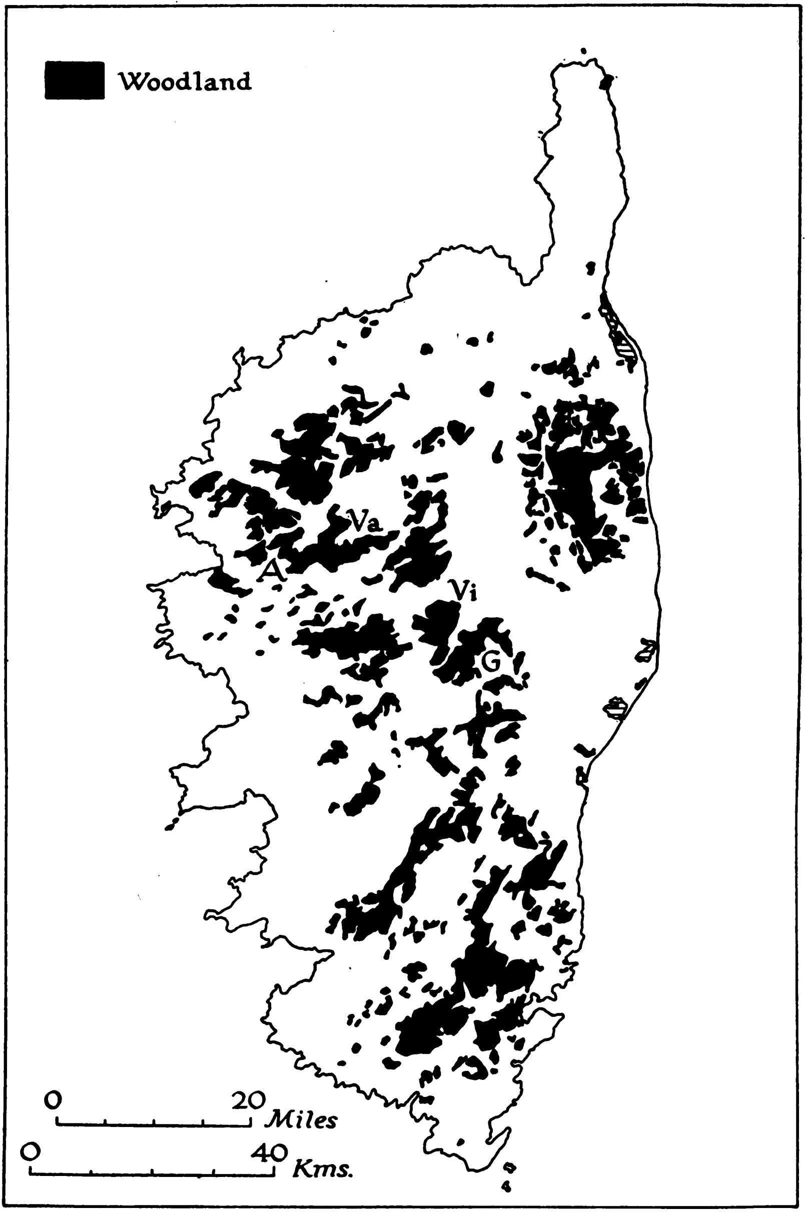


Fig. 29. Distribution of woodland
The four largest individual areas of woodland in Corsica are the forests of Aïtone (A), Ghisoni (G), Valdo-niello (Va) and Vizzavone (Vi). The wooded areas in the *Chataignèraie* and in the south-east, which from the map appear to be more extensive than the four listed above, actually consist of a considerable number of individual forests, which cannot be distinguished owing to the small scale of the map.
Based on 1:500,000 *Carte de France*, Sheet NK 32 (Paris, 1934).

occasional eucalypts and tamarisks, planes in the *Balagne*, and the chestnut in higher parts. Many of these trees are individually famous, having attained great age and size.

There is very little real forest of evergreen oak at the present time, although occasional small stands may occur. In the past, when human interference played a smaller part than it does at present, it was almost certainly a forest-forming tree. The timber is valuable on account of its hardness, durability and attractive grain, but it is rarely marketed. This is because it is considered more profitable to allow pigs to roam in the groves, so that the trees die of old age, and regeneration is impossible as young seedlings have no chance of survival. In the south of the island the cork oak is commonly found; it grows in small groves, among which may occur grassy glades and large granite boulders. The trees are periodically ringed, and the outer bark removed; this is made into corks, which form one of the chief items of export (Plate 58).

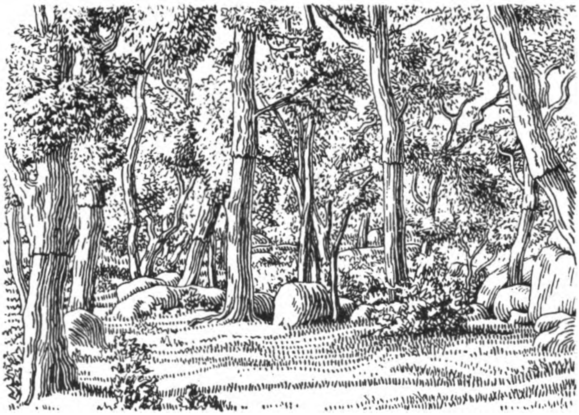


Fig. 30. A Corsican cork oak forest (drawn from a photograph)

Eucalypts are found in the badly drained alluvial areas on the east coast or at the heads of the west coast gulfs (Plate 16). Few Mediterranean trees grow as rapidly; in addition, they do not object to marshy soil, and by their rapid absorption and transpiration of ground water they help to dry out the terrain. Numerous sub-tropical and tropical varieties of trees have been introduced, notably in and around Ajaccio; these include ornamental date-palms (Plate 53), apricots, citrus fruits (see pp. 124–5) and peaches. Olives, wild and semi-cultivated, occur widely up to about 400 m. (see pp. 123–4, Plate 60).

(2) From 600 to 850 m. are the great chestnut woods, associated in many areas with the beech. The former occupy large areas of the valleys and slopes of the schistose uplands in eastern Corsica; the district is often known as the *Chataigneraie* (see p. 23), as are other parts of France where the tree grows extensively, such as in the Cévennes.

(3) From 850 m. to the upper tree level (Plates 39, 40), which varies from 1,500 to 1,800 m., is the zone of pines, with which are associated beeches and thickets of alders in the upper parts. The chief species are the Corsican pine (*Pinus laricio*)*, the maritime pine (*P. pinaster*) and umbrella pine (*P. pinea*). Firs are common in places.

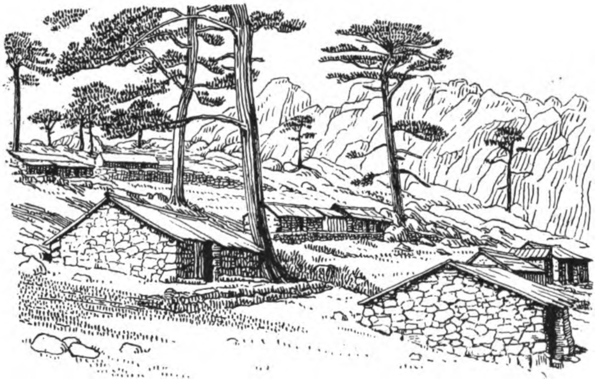


Fig. 31. Shepherds' huts near the Col de Bavella (drawn from a photograph)

The higher parts of the Forêt de Bavella near the col (1,240 m.) between Solenzara and Zonza have been drastically thinned by felling, while regeneration has been prevented by grazing. The roughly built huts are used as summer dwellings by shepherds (see pp. 109, 126).

P. laricio under optimum conditions grows for five or six centuries, attaining a height of 45 m., and may be nearly 6 m. in circumference at the base. They grow isolated or in small compact clumps (Fig. 31); occasionally they form larger woods, as, for example, the Forêt de Zonza in the south of the island. It is a valuable timber tree, and attains greater dimensions than does any other European forest tree. Its growth is slow, the best age for exploitation being about 300 years.

---

* It is now generally accepted among botanists that the Corsican pine (*P. laricio*) is a variety of the Austrian pine and not a distinct species. But although it is correctly called *P. nigra* var. *Poiretiana*, it is still more commonly known as *P. laricio*.

The wood is heavy and resistant to decay, but it is brittle and extremely resinous and cannot compare with *P. sylvestris* of the Baltic lands. Much timber was exported to Italy for naval construction until 1933, but this market is now closed and prices have dropped appreciably. Some wood is sent to the mainland for furniture making. Many parts of these pine forests have been drastically thinned. The beech is found both mixed with *P. laricio*, as in the Forêt de Vizzavone (Plate 38), and in extensive pure forests. Generally speaking, it appears to occupy north-facing slopes. It seems that the pines are being ousted by beech in areas where there is no grazing, as in the enclosed state forests. Where grazing is permitted, beech seedlings are destroyed while the unpalatable pine seedlings survive. On the Mt Coscione plateau the trees occupy shallow glades separated by pasture and scattered blocks of granite. These trees attain great size, reaching heights of 15–20 m., with girths of 6–8 m. at a metre from the ground. Sometimes the beech forms an impenetrable thicket of dwarf trees, with long horizontal interlacing branches about a metre above the ground. An example of this type of forest is below the Col Muratello near Mt d'Oro.

Maquis

The *maquis* (or *macchia*) varies from impenetrable evergreen thickets to arid scrub (Plates 19, 42–3). In some areas, chiefly in the south, it forms a continuous low cover of stunted cistus, known as the *mucchio* in Corsica, which grows 0·5–1·0 m. high. Among it lie blocks of granite, and the roots find sustenance in little pockets of soil. In parts with more moisture the scrubland becomes like a shrubbery; the cistus varies from 1·0 to 2·0 m. in height, with myrtle from 2·0 to 5·0 m. high, entwined with the thorny tendrils of sarsaparilla, while there is usually a close carpet of dwarf myrtle below. In even better watered places arbutus grow to a height of 3·0–4·0 m., while among them are occasional evergreen oaks and lentisk. Numerous other plants are found, such as lavender, heath (the roots of which are used to make pipes), rosemary, juniper, laurestinus, thyme, Spanish broom and honeysuckle. Most of these plants are aromatic, and their scent may sometimes be smelt far out at sea; hence the name 'Scented Isle'. Other common plants are the wild olive, and the prickly pear, which is widespread in the south of the island (Plate 43). Ferns occur in abundance in the shady gorges, and there is a wealth of flowers, especially in spring and early summer.

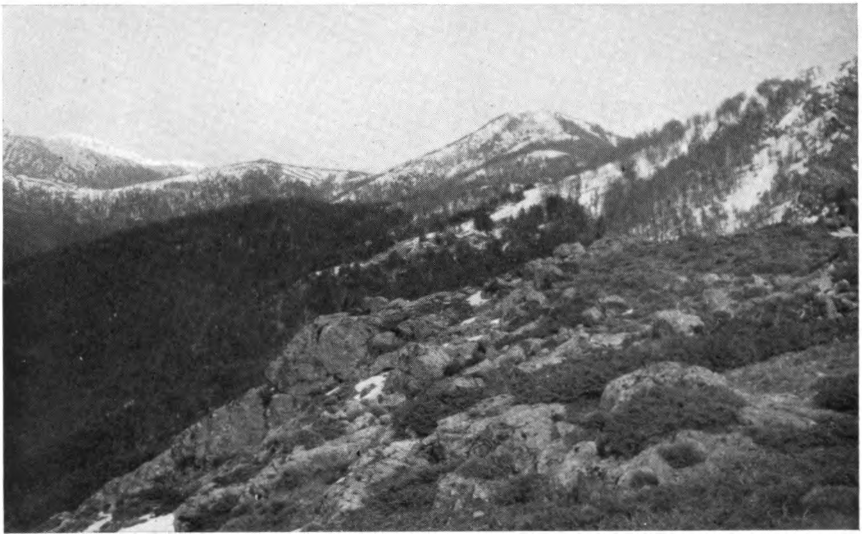


Plate 41. Forêt d'Aïtone and the Col de Vergio

Photograph taken in mid-March at a height of 1,250 m. near the snow line. On the left is the upper Porto valley, the sides of which are covered with the dense pinewoods of the Forêt d'Aïtone. A road climbs up through the forest to the snow-covered Col de Vergio (1,464 m.), the highest motorable pass in the island. In the foreground is a sub-alpine scrub of genista, juniper, etc., among the granite boulders. The rounded peak in the background is Capo alla Ruja (1,715 m.).

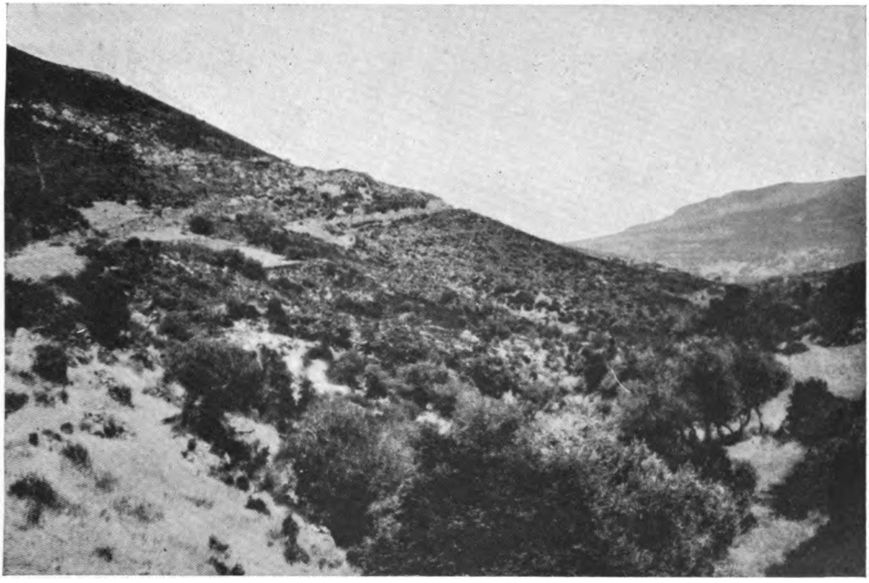


Plate 42. *Maquis*

Near Palasca, on the road from Ponte-Leccia to Calvi. The larger shrubs are wild olives.

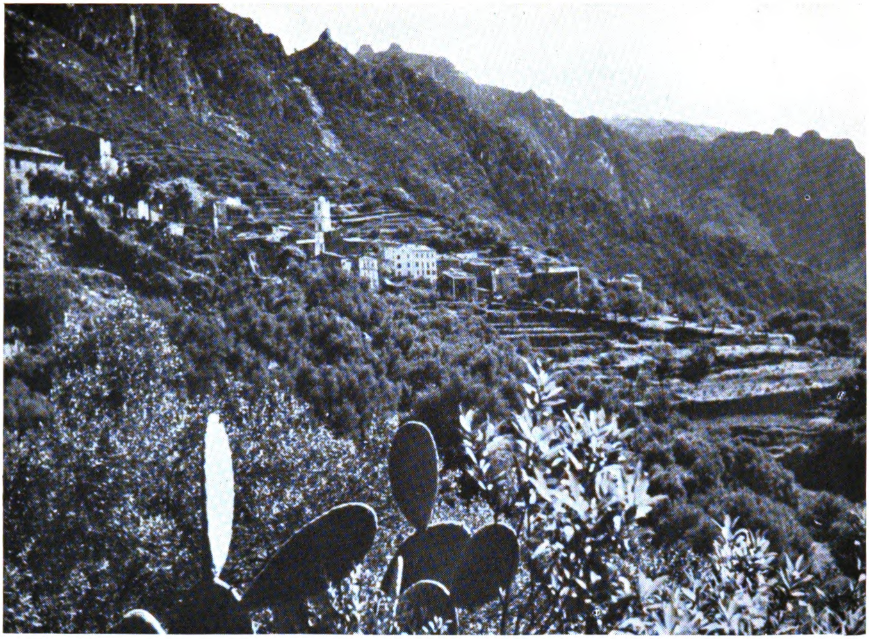


Plate 43. Ota

The village of Ota lies on a south-facing hillside above the Porto valley, with terraces for cultivation above and below. The *maquis* in western Corsica is luxuriant. Prickly pear occurs at intervals among the characteristic evergreen shrubs, and locally may cover considerable areas.

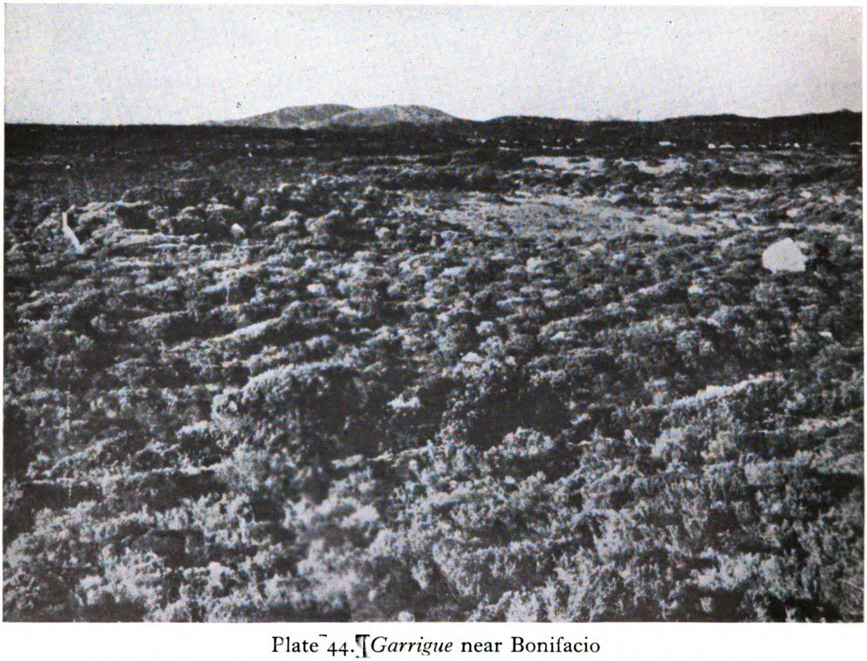


Plate 44. *Garrigue* near Bonifacio

The gently undulating limestone plateau is covered with dwarf shrubs.

There has been much destruction of the *maquis* by fire, by the over-grazing of goats, by burning for charcoal, and by its extensive use as fuel; truck-loads of thorny twigs are sold in the streets in the towns. The first of these causes is especially potent; in the course of summer droughts all vegetation becomes as dry as tinder and there are frequent accidental fires, as well as deliberate burnings by shepherds to increase the area of pasturage. Another cause of *maquis* destruction is the burning and subsequent ploughing of a small area; this is harrowed and sowed with wheat for a year or two until crops begin to fail, whereupon the land is left and may in due course revert to *maquis*.

On some of the areas of arid calcareous soil, notably in the extreme south, a dwarf vegetation is found which closely resembles the *garrigue* of southern France. The constituent shrubs are small, and usually aromatic or spiny. The spaces between them are often occupied by annuals conspicuous only in spring or autumn, exposing rock or thin stony soil in summer (Plate 44).

Pasture

Natural grassland is not common as a rule in Mediterranean lands owing to the scorching summer drought. Pasture occurs extensively in Corsica, however, on the higher slopes above the tree-line, where its annual growth receives a start from the melting snows (Plate 59), and in glades near the upper limit of trees and *maquis*. The area is increasing due to the gradual destruction of the *maquis*. The total area of natural grassland in 1937 was 230,000 ha., over a quarter of the total area of the island, while there was an additional 18,000 ha. of meadowland, chiefly along the upper river valleys (Plate 60).

Alpine Vegetation

At the upper edge of the pine and beech forests, small stunted trees persist as associates of a Corsican endemic species of alder (*Alnus suaveolens*), which forms a relatively continuous sub-alpine belt of low compact shrubs at altitudes between 1,700 and 2,000 m. In this zone are found numerous small areas of bog, known as *pozzines*; these occur on the sites of lakes which have been almost completely filled by peat and by sand washed down from the slopes above.

The true alpine zone varies with locality, but generally speaking stretches from about 2,000 m. to the summit peaks. It usually begins with a belt of dwarf shrubby berberis, juniper and genista (Plate 41).

Above this is a zone of sparse restricted vegetation among the bare rock and scree, poor in species and in individuals, many of which are peculiar to the island.

SWAMP VEGETATION

Along the east coast are extensive areas of lagoon and marshland, with numerous meandering streams (see Fig. 11). The vegetation consists of reeds, osiers, various flowering plants, rows of poplars, and occasional clumps of eucalypts which have been planted to assist natural drainage.

FAUNA

Two interesting mammals, the mouflon (*Ovis musimon*), known as the *mufro* on the island, and the wild boar (*Sus scrofa*) still survive. The mouflon, which lives in the mountains, is more like a deer than a sheep; it has slender legs, immense horns and is covered with brown, black or white hair. The commonest variety is *Ovis musimon occidentalis*, although small numbers of *O. musimon orientalis* are found on the calcareous rocks of the south. Wild boar are still hunted in the dense forests, where they fatten on the mast of the ilex and beech. The boar has been compared with the extinct *Sus strozii*, remains of which have been found in Tuscany. Other animals include a few deer (*Cervus corsicanus*), hares, marmots, badgers, occasional wild cats and numerous foxes; rabbits are completely absent. In the Calanques district in the north-west of the island are numerous wild goats; they are probably the descendants of domestic goats which escaped many years ago. There are no venomous reptiles in Corsica; snakes are common but they are harmless.

The bird life of the island is numerous, due largely to the *maquis* with its plentiful shelter and berries; there are blackbirds, thousands of which are potted and exported as a great delicacy (*pâtes des merles*), woodcock, snipe, quail and partridge; larger birds such as buzzard and raven are also common. One species peculiar to Corsica is a nuthatch, *Sitta whiteheadi*, which is found in the coniferous forests of the south. Apart from this, however, Corsica does not present particular characteristics of bird life, as it is near the mainland and on the route of migratory species.

The varieties of fish in Corsica are relatively few; they include trout in the mountain streams, eels in the brackish *étangs* and carp in ponds. One variety peculiar to Corsica is the *Euproctus montanus*, found in the Lac d'Argento in the Mt Cinto massif.

Chapter VI

PUBLIC HEALTH

Administration: Vital Statistics: Causes of Death: Special Diseases: Water Supply and Sanitation: Measures for the Preservation of Health

ADMINISTRATION

The system of Public Health administration in Corsica, as in the case of other French departments, is controlled by a central administration which consists of the Ministry of Health (*Ministère de la Santé publique*), together with an advisory Supreme Public Health Council (*Conseil supérieur d'Hygiène publique*).*

The prefect at Ajaccio is responsible for all health services within Corsica. He presides over and is assisted by the Advisory Departmental Health Council (*Conseil départemental d'Hygiène*). In addition, the arrondissements are Sanitary Districts (*Circonscriptions sanitaires*), in each of which (at Ajaccio, Bastia, Corte and Sartène) functions a Sanitary Commission (*Commission sanitaire*) presided over by the sub-prefect. In the 364 communes, the mayors are responsible for enforcing health regulations and for drafting communal regulations. Municipal health services, which take the form of health offices (*Bureaux municipaux d'Hygiène*) under the authority of the mayor, have been established at Ajaccio and at Bastia. Corsica is also included in the Sanitary District of Marseilles, one of the five sections into which the coast of France is divided to guard against the introduction of diseases by sea.

In practice, health services depend upon the available medical personnel. In 1936, the last year for which figures are available, the personnel in Corsica comprised the following:

Doctors	116	Midwives	31
Chemists	58	Herbalists	1
Dental surgeons	19		

Source: *Annuaire Statistique* for 1938, p. 43 (Paris, 1939).

Over France as a whole in 1936 there was one doctor on an average for each 1,624 inhabitants. The corresponding figure for Corsica was one doctor for each 2,783 inhabitants; only five mainland departments had proportionally fewer doctors.

---

* Details of the central administration are given in the Handbook on France, vol. II, chap. VI.

VITAL STATISTICS

The birth-rate, the general death-rate and the infant mortality rate for Corsica are given for the years 1923–38; corresponding figures for France and for England and Wales are inserted for comparison.

Year	Birth-rate per 1,000 population			General death-rate per 1,000 population			Infant mortalitys Deaths of infants under 1 year per 1,000 live births		
	Corsica	France	England and Wales	Corsica	France	England and Wales	Corsica	France	England and Wales
1923	18·1	19·1	19·7	14·1	16·7	11·6	119	96	69
1924	16·9	18·7	18·8	14·1	16·8	12·2	101	85	75
1925	16·0	19·0	18·3	13·5	17·4	12·2	102	89	75
1926	15·1	18·8	17·8	13·4	17·4	11·6	99	97	70
1927	14·0	18·2	16·6	12·8	16·5	12·3	102	83	70
1928	14·3	18·3	16·7	13·0	16·4	11·7	108	92	65
1929	13·9	17·7	16·3	12·6	17·9	13·4	99	96	74
1930	13·2	18·0	16·3	10·9	15·6	11·4	84	78	60
1931	12·7	17·5	15·8	11·5	16·2	12·3	99	76	66
1932	12·5	17·3	15·3	10·7	15·8	12·0	77	77	65
1933	13·2	16·2	14·4	11·0	15·8	12·3	76	75	64
1934	11·9	16·2	14·8	10·2	15·1	11·8	88	69	59
1935	11·9	15·3	14·7	11·2	15·7	11·7	88	69	57
1936	10·6	15·0	14·8	9·3	15·3	12·1	79	67	59
1937	10·1	14·7	14·9	8·7	15·0	12·4	77	65	58
1938	9·6	14·6	15·1	8·8	15·4	11·6	86	66	52

Source: The figures for France and for Corsica are taken from the *Annuaire Statistique* for each year; the figures for England and Wales are taken from the *League of Nations*: *Annual Epidemiological Report* for the year 1938 (published in 1941), pp. 62 *et seq.*

The salient feature of this table is that both the birth-rate and death-rate are apparently lower than corresponding figures for all France. In each year the Corsican birth-rate exceeded the death-rate, whereas France as a whole experienced six years in which the reverse took place. Both birth-rate and death-rate decreased markedly; in 1938, the former was only half of what it was in 1923.

The death-rate in Corsica is not only markedly lower than that of France as a whole, but also lower than that of England and Wales. In 1938, the next lowest death-rate in any other French department was in Lot, where it was 12·2.

Infant Mortality. No single index affords a better idea of the public health standard of a country than does its infant mortality rate. While Corsica has experienced during the past 70 years the decline common to most countries, its figures are still considerably above those of all France and of England and Wales.

CAUSES OF DEATH

Some reference should be made to one item of first-rate public health interest, namely, the *causes of death*, and the toll which specific diseases exact annually among a given population group.

The following table summarizes the number of deaths due to all causes in Corsica, and the incidence of each per 100,000 of the population in 1935, the last year for which detailed statistics are available. Comparative figures for the whole of France are appended.

Causes of death in France and Corsica, 1935

	Corsica		France
	No. of deaths	Rate per 100,000 living	Rate per 100,000 living
Typhoid and paratyphoid	10	3·1	2·6
Measles	7	2·2	1·7
Diphtheria	6	1·8	3·8
Influenza	64	19·9	18·3
Pulmonary tuberculosis	139	43·0	106·5
Tuberculosis, other types	15	4·7	16·2
Cancer and other tumours	68	21·1	105·1
Cerebral haemorrhage	133	41·3	118·8
Heart disease	196	60·9	154·8
Bronchitis	93	28·8	17·2
Pneumonia	97	30·1	68·2
Diseases of the digestive system	91	28·3	79·5
Nephritis	78	24·3	45·0
Congenital malformations, diseases of the puerperal state, etc.	52	16·1	33·1
Suicide	7	2·2	20·1
Other violent deaths	92	28·6	50·5
Other causes	887	275·5	419·4
Unspecified or ill-defined	1,296	402·5	309·7
Total	3,331	1034·4	1570·5

Source: *Statistique du mouvement de la population—Nouvelle série, tome* XV, *année* 1935, *2ème parte: les causes de décès* (Paris, 1938). This table is also given in the *Annuaire Statistique* for 1938.

There are some striking features about these figures. The high proportion of deaths due to 'Causes unspecified or ill-defined' (cf.

England and Wales 3·2 per 100,000 for the same year) is partly caused by the method of certification of death; especially in rural areas certification of the cause of death is made in a large number of cases by non-medical persons, and frequently no record of cause of death is stated. In addition, the medical profession in France has always rigorously respected the relations between medical attendant and patient, and has strenuously objected to certifying the causes of death on the grounds that such action would constitute a violation of 'le secret medical'. The high total is also partly due to the extremely limited number of causes given in the abridged departmental statistics, which specify only sixteen heads. Such causes as 'Old age', 'Skin diseases', 'Scarlet fever', etc. do not appear individually. Even the classification for France as a whole, based on the *Abridged International List of Causes of Death*, provides only forty-three specific titles, which necessitates the grouping of some diseases.

The most significant fact is that only 'Causes unspecified or ill-defined' have a markedly higher rate in Corsica than in France; owing to the relatively small number of doctors to certify deaths, this is as might be expected. The only others higher in Corsica are bronchitis, influenza and measles. In most cases the rate in France is several times higher than that in Corsica, although of course the greater total of 'Unspecified or ill-defined causes' may affect the comparative rates.

The fact remains that the death-rate in Corsica is lower than that in France as a whole in spite of adverse factors, which include contaminated water supplies, extensive tracts of ill-drained land, large numbers of poorly lighted and dirty houses, primitive sanitation and the insufficient medical services. Other factors more than balance these; they include the absence of congested industrial towns, the high proportion of vegetables, fruit and milk in the diet, and the general beneficial effects of a mountain and Mediterranean environment (clear air, long hours of sunshine with a high ultra-violet content, etc.).

SPECIAL DISEASES

Malaria. The parasite which causes malaria is only transmitted from man to man by the bite of *Anopheles* mosquitoes. The mosquito is itself harmless; in the first instance it acquires the parasite by biting a malarious person, and it must then incubate the parasite for at least a week before it can transmit it to a second person.

The distribution of malaria in Corsica may be most readily understood by reference to the local *Anopheles* mosquitoes. Only one species, *A. maculipennis*, is of any importance. This insect breeds in stagnant or slowly moving water. It is therefore almost entirely confined to the lower parts of rivers where they flow slowly through the coastal plain, to marshes and *étangs* in those plains, and to irrigated gardens, in which water is often used wastefully. Most villages are high above the irrigated areas and are free from malaria. The disease is therefore almost entirely confined to the lowlying areas near the east coast; the whole coast from Bastia to Porto-Vecchio is malarial. On the steeper west side there are a few small areas of flat marshy land, and therefore small centres of malaria at Propriano, Sagone, Calvi and St Florent. Inland there are also a few spots suited to this mosquito and therefore malarious, e.g. Ponte-Leccia on the river Golo, and Corte on the river Tavignano. Most of the interior of the island is free from malaria, because *A. maculipennis* cannot breed in the only water which is available in summer, that is, small hill streams and minute trickles of water in the beds of nearly dry torrents. In waters of that type in the Balkans or Levant there occurs a different species of mosquito (*A. superpictus*), but it is absent from Corsica, a fact which greatly simplifies the problem of controlling malaria, for the hill streams may be neglected.

Even in the more malarial areas the disease is not very widespread, or very severe in its effects so far as can be determined. It is only acquired in summer, July to September inclusive being the most dangerous months. The milder tertian malaria is the most frequent form.

The problem of control is a matter of engineering. In 1908, Clemenceau sent a Commission of Enquiry which reported on the urgent needs for remedial measures. A scheme was drawn up, estimated to cost 11·5 million francs, to provide for the control of the lower reaches of rivers and of outfalls, to fill or drain the marshes, to plant eucalypts and grasses, to control the meres, and to provide adequate supplies of drinking water. The scheme was never completed, but there have been improvements in some areas, notably round Bastia and Aléria. The most active centre of malarial research is at Bastia; much information about the prevalence of the disease, and of methods of conducting antimalarial campaigns, has been accumulated. It is difficult and costly to deal with the large *étangs*. Many of the agricultural workers avoid much of the risk of malaria by working by day in the plains, but going up to hill villages for the night, the period when the mosquitoes are biting. A large number of the inhabitants of Porto-Vecchio leave the town at night during the summer months.

Intestinal Diseases. In all Mediterranean countries, *enteritis* and *diarrhœa* are very common, and *dysentery* and the *enteric fevers* are not rare. These intestinal disorders may take the form of gripes and looseness, a frequent diarrhœa, or the passage of blood and mucus often with severe griping pains. Though precise information from Corsica is not available, there is little doubt that this group of diseases cause many deaths in infants and young children, and that they make a large contribution to the high infant mortality (see p. 76). It is to be understood that these diseases are infectious, the germs being conveyed from some other person's excrement. They may be swallowed in water, or milk, or uncooked food (raw fruit, salads, etc.). It has been demonstrated elsewhere in the Mediterranean area that they can be greatly reduced by such measures as the installation of good water supplies in villages and towns, provision of better types of latrine and the destruction of flies. Numerous individual precautions may also be taken (see pp. 82–3).

Other Diseases. Other common diseases of Mediterranean countries also occur. Visitors from northern Europe usually suffer from *sandfly fever* during their first summer, and may be incapacitated from active work for three or four weeks. The first attack gives some degree of immunity, but unfortunate individuals may be attacked several times. The disease is transmitted by sandflies (*Phlebotomus*), which bite at night and are so small that they pass through the meshes of an ordinary mosquito net, so that it is almost impossible to avoid being bitten by them. *Dengue*, a somewhat similar disease transmitted by the yellow-fever mosquito *Aëdes aegypti*, occurs in great epidemics in summer at intervals of a number of years. Though it is very rarely fatal, it causes great prostration, and may disorganize the commerce and public services of a city. This mosquito does not breed in swamps, streams or other natural waters, and is therefore not controlled by measures taken for the control of malaria. It breeds in small domestic water containers (vases, tanks and barrels), which are very difficult to deal with unless the sanitary authority has power to enter houses and compel the population to empty these innumerable breeding places. *Undulant fever* (*Brucellosis*) is known to occur in Corsica and is probably not uncommon. It is generally acquired by swallowing uncooked milk or cheese. *Infectious eye diseases* (acute conjunctivitis and probably trachoma) are of frequent occurrence. *Intestinal worms* (of which the most important is *Ascaris lumbricoides*) are doubtless common. It is probably that tapeworms, particularly the pork tapeworm, *Taenia solium*, are common. Infection with hookworm (*ankylostomiasis*) may be present in irrigated areas, but is likely to be mild and of no clinical significance.

WATER SUPPLY AND SANITATION

The water supply of the Corsican communes is summarized in the following table:

Arrondissement	Mains water supply from Rivers (filtered and sterilized)	Springs	No mains water supply
Ajaccio	1	26	53
Bastia	2	36	91
Corte	3	27	78
Sartène	—	16	31

Source: This table is a summary of information contained in *Didot-Bottin* (Paris, 1939).

It will be seen that 253 out of the 364 communes have no public water supply; in many cases too only a small number of the houses in the 111 communes with public supply have water laid on, especially where much of the population is dispersed.

Ajaccio and Bastia each has a reservoir in the hills above the town, and running water is supplied to the majority of the houses. The reservoir at Ajaccio is supplied by water brought from the Gravone in a conduit (Plate 62). During the summer drought there is frequently a shortage of water, when the reservoirs may be almost dry. Castiglione and Poggio de Venaco have filtered supplies taken from the rivers and stored in small reservoirs. Springs form the purest and most reliable water supply, and 105 communes derive their public supplies by pipes from springs on the hill sides above. The majority of communes have to depend on supplies carried in jars from shallow wells or from rivers. These sources are usually deficient in supply in summer, and often contain germs which result in stomach disorders of various kinds. In the majority of communes it is unsafe to drink water unless it has been boiled or chlorinated. As is the case with most Mediterranean peoples, *vin ordinaire* is widely drunk, and water but rarely.

Several ports have drinking water available on or near the quays for shipping; these facilities are described in Chapter XI under the respective ports.

Little information is available about the disposal of sewage; the island's services can only be described as primitive. There is a water carriage system at Ajaccio, Bastia, Calenzana and Sartène. Some of the large hotels have their own systems.

MEASURES FOR THE PRESERVATION OF HEALTH

(1) During the malaria season from 1 May to 30 November:

(*a*) Live in the hills, 3 km. or more from irrigated areas and from coastal swamps.

(*b*) Sleep under a mosquito net carefully tucked in and kept in good repair. If one sleeps on the ground, tuck the edge of the net under a ground sheet.

(*c*) Avoid being needlessly bitten: no bare legs or arms should be exposed at or after sundown.

(*d*) If possible, kill mosquitoes in houses, etc. with fly spray.

(*e*) Treat a case of fever by making the person lie down, and give 10 grains of quinine and a dose of salts. If the person is not better next day, report to a doctor.

(2) In warm climates intestinal disorders are very common with Europeans.

They may be avoided:

(*a*) By chlorinating or boiling all water (however clean it looks) before it is drunk or used for cleaning teeth, etc. A convenient way of getting boiled water is to demand tea, or one of the hot tisanes always available in French countries.

(*b*) By never drinking fresh milk, or locally prepared mineral waters.

(*c*) By not eating lettuces, etc. (which cannot be cleaned by reason of the folds).

(*d*) By avoiding over-ripe or damaged fruit and by soaking fresh fruit in permanganate of potash before eating it.

(*e*) By keeping one's body warm at night.

(*f*) By being inoculated against typhoid and paratyphoid.

In the absence of the doctor minor intestinal troubles are treated by rest (i.e. lying down, taking nothing but water for a day or so), warmth, and a dose of salts.

(3) Ophthalmia and other eye diseases are common. If a person gets an inflamed eye, boil some water, let it cool, and fill a mug with it: make him open and shut his eye under water repeatedly. Boric

lotion is much more effective. If a piece of grit on the eyeball or inside the lid can be seen, remove it with the corner of a handkerchief. A drop of castor oil will often sooth an eye inflamed by dust.

(4) The risk of sandfly fever may be reduced by clearing away rubbish, old brick-work, etc. from the immediate neighbourhood of houses, and by not living within 200 yards of ruined buildings, for it is in cracks in broken masonry that sandflies principally breed.

(5) The risk of tapeworm may be reduced by refraining from eating partly cooked meats, such as are often put in sausages.

(6) Whenever possible wash all over, not only because one gets so dirty in a hot, dusty place, but also because soreness may easily develop, particularly between the toes and in the crutch: if these parts become inflamed, it is not easy to cure them. Do not walk about barefoot.

Chapter VII

HISTORICAL OUTLINE

Early History: The Early Middle Ages (to 1347): The Domination of Genoa: The French Revolution and the Napoleonic Wars: Corsica and Fascist Italy: The Vichy Regime

The history of Corsica has been the story of almost continuous strife, of an attempt to maintain its independence against the powerful states that successively dominated the western basin of the Mediterranean Sea. After the break-up of the Roman Empire, the central position of the island in the western Mediterranean Sea made it into one of the battlefields where contending powers of the shores around met—Goth against Vandal, Vandal against Byzantine, Lombard against Byzantine, Frank against Lombard, Moslem against Frank, Pisan against Genoese, Aragonese against Genoese, French against Genoese, and French against English—all these struggles were waged on Corsican soil (Figs. 32, 33). Sometimes the Corsicans themselves appealed for aid to an outside power regarded as the lesser of two evils. The island was neither large nor populous enough to become the basis of a powerful state itself. The coastal strong points were nearly always held by mainland maritime powers; sometimes the whole island except the forts was in Corsican hands; sometimes resistance withdrew into the mountains or quietened into an uneasy sullen acquiescence to a foreign order. Rarely were the Corsicans completely crushed. But the odds were always too great, and when finally France purchased the island from Genoa in 1768 all hopes of an independent state vanished. And to-day the Corsicans are French in sentiment as well as in sovereignty, a feeling helped by the fact that France's greatest ruler, Napoleon, was of Corsican birth.

Early History

The early history of Corsica is veiled in uncertainty, and there are few prehistoric remains, except for a dolmen at Fontanaccia known as the 'Stazzona del Diavole', and for a few isolated menhirs (*stantare*). The first civilized settlement seems to have been made in the sixth century B.C. by Greeks from the city of Phocaea on the western shore of Asia Minor, who founded Alalia on the east

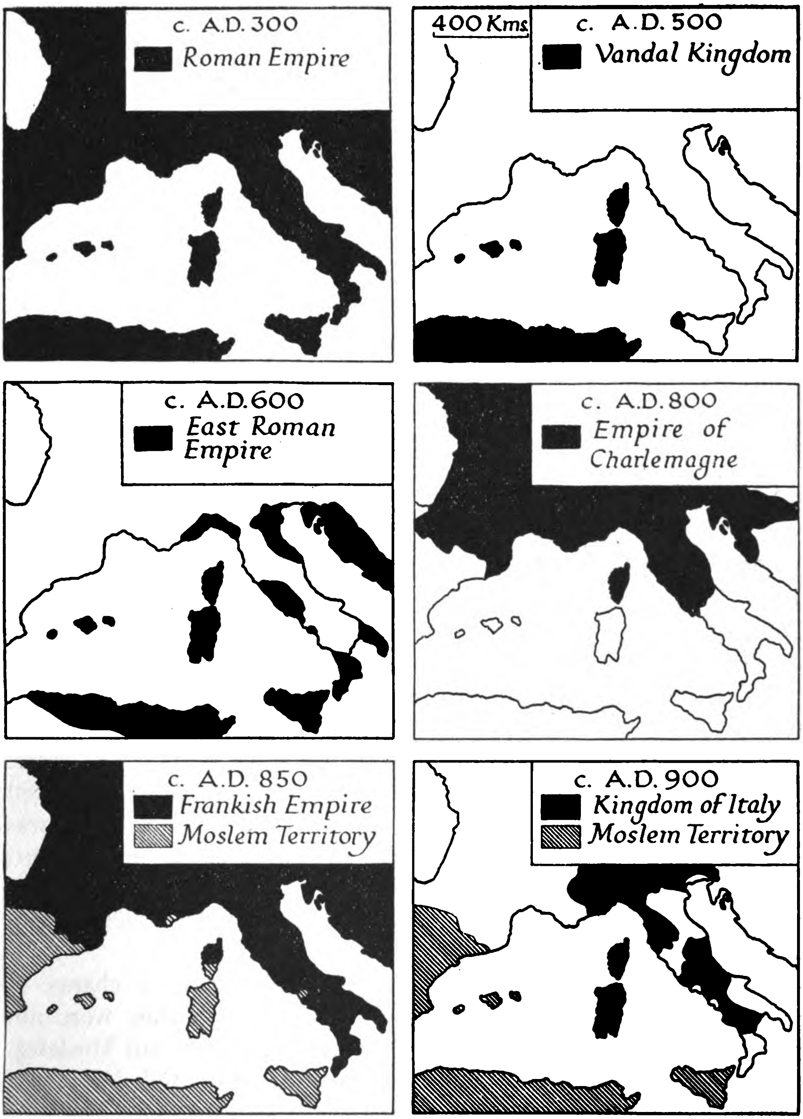


Fig. 32. A series of maps to illustrate the history of Corsica from *c.* A.D. 300 to *c.* A.D. 900

These maps, together with those on Fig. 33, show how successive mainland powers endeavoured to dominate Corsica. The extent of domination varied from a vague sphere of influence to almost complete territorial control, but rarely was Corsican patriot resistance completely crushed.

These maps and those on Fig. 33 are based on (1) *Cambridge Medieval History, Volume of Maps*, Map nos. 2, 16, 57, 70 (Cambridge, 1936); (2) *Cambridge Modern History Atlas*, Maps 1, 26, 102; (3) *Philip's Historical Atlas*, Plates 6*a*, 7*a*, 13, 21, 27, 29, 41, 71 (London, 1927).

coast (near the present Aléria at the mouth of the Tavignano river). But they remained only for about five years, then the majority sailed away to the Mediterranean coast of France, where they either founded Massilia or joined their fellows who had settled there previously. The Etruscans, from the nearby Italian coast, then gained a precarious foothold, and in turn were overcome by the Carthaginians.

The Romans gained a footing in the island after the defeat of the Carthaginians in the first Punic War (250 B.C.), but they were not established firmly until the middle of the second century B.C. In 104 B.C. the town of Mariana was founded, and in 88 B.C. Alalia was re-established as Aléria. The island formed one of the provinces of the Empire, and Rome maintained its hold until the middle of the fifth century A.D. This was to be the longest period of unchanged ownership in Corsican history, and was due to the fact that all the shores of the western Mediterranean Sea were held by the same power. Corsica was of no great value to Rome; it supplied timber for galleys, and grain, resin, honey, eels and oysters for the great feasts; it was used too as a place of banishment for political offenders. Compared with Sicily or Crete, the island contributed nothing to the civilization of the ancient world.

When the Roman Empire in the west began to crumble, the ownership of Corsica was contested by the Vandals and the Goths; the former under Genseric took possession in A.D. 469 and held it for 65 years. The forests supplied timber for their fleets of galleys which roved the west Mediterranean Sea. The Vandal power in north Africa was destroyed by an expedition sent by the Byzantine Emperor Justinian; Corsica was captured and annexed to the Exarchate of Africa of the East Roman Empire, to which it remained nominally attached until 774.

The people of Corsica derived little benefit from the change of masters; although taxes were extorted from them, they were not defended from the constant raids of Goths, Lombards and Moslems. The last of these first attacked the island in 713, and dominated part at least until the middle of the tenth century. The Moslems were driven out in 806 by Pepin, ruler of the Ostrogothic kingdom of Italy, and again by Charlemagne, who captured the whole island, but after the latter's death in 814 they took complete possession. In 828 Count Boniface of Tuscany attempted to capture the island. He built a fortress in the south of Corsica, the origin of the present town of Bonifacio, but he failed to dislodge the Moslems from the southern part of the island. The Moslems left many traces in legends, folk-lore, buildings, customs and clothing, feuds, and in the numerous forts (*kalaa* or *cala*) which became the nuclei of such towns as Calasima and Calacuccia. Tradition says that Ajaccio was founded by them in 815.

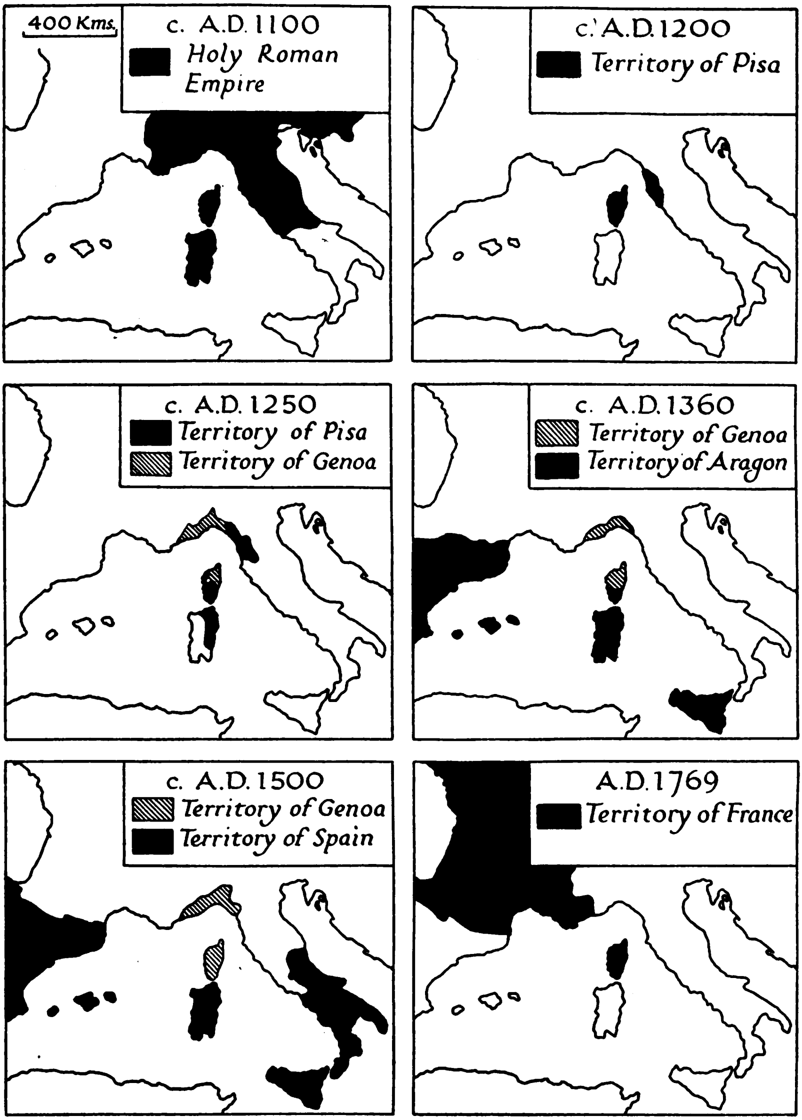


Fig. 33. A series of maps to illustrate the history of Corsica from *c.* A.D. 1100 to A.D. 1769

The Early Middle Ages (to 1347)

During the tenth century there began a period of feudal anarchy when petty lords constantly fought each other, while the Moslems maintained spasmodic hold in the south. In the eleventh century Sambucuccio, lord of Alando, drove the feudal lords into the south of the island and into Cap Corse, while the *Terra di Commune* was established over the rest of the island. This was a federation of autonomous parishes, each of which nominated a number of councillors, who administered justice under a *podestà* or president; the *podestàs* chose the Supreme Council of the Twelve, who were charged with the making of necessary laws and regulations. This communal system survived until the French Revolution. But it did not mean the abolition of feuds, and in 1020 the *Terra di Commune* called in William, marquis of Massa, to assist them. He defeated the count of Cinarca, who held the southern part of the island, and the other feudal lords, and thus established order in the island.

At the end of the eleventh century the Pope claimed the island, and was supported by the Corsican clergy. In 1077, the Corsicans declared themselves to be subjects of the Holy See, and Pope Gregory VII granted the island to the bishop of Pisa and his successors. Under the regime of this prosperous commercial republic, Corsica flourished, in spite of internal ecclesiastical dissensions, for over half a century.

But other commercial republics were arising, and Genoa began to dispute the mastery of the seas with Pisa. Corsica was unfortunately one of the spheres of contention. In 1138, Pope Innocent II attempted a compromise and unwisely divided the ecclesiastical jurisdiction of the island between the bishops of Pisa and Genoa. At first their temporal spheres coincided with the ecclesiastical divisions, but in 1195 Genoa captured Bonifacio and held it against Pisan counter-assaults. Corsica was thus divided into three factions, adherents of Pisa, of Genoa and of the *Terra di Commune*. Then, to add to the confusion, King James of Aragon was invested with the sovereignty of Corsica and Sardinia in 1298 by Pope Boniface VIII; this sovereignty was nominal for most of the time, but occasionally the Spaniards became yet another warring faction in the unhappy island. In 1325, Aragon attacked and reduced Sardinia, and destroyed the Pisan fleet. This virtually settled the struggle between Pisa and Genoa, although some of the Pisan inland settlements resisted until the beginning of the next century.

The Domination of Genoa

In 1347, the *Terra di Commune* and the feudal lords offered the sovereignty of the island to Genoa, on condition that their laws and customs should be preserved. Genoa thus held the island, at times effectively, at others nominally, for the next 400 years; frequently only the strongly fortified towns of Calvi, Bastia and Bonifacio were retained; occasionally even these were lost. The period of Genoese dominion began unhappily, as in 1350 over two-thirds of the population were destroyed by the Black Death. The confused and troubled period which followed was marked by constant internal strife. In 1372, Aragon obtained a precarious hold in the south, in 1407 Corsica became French (Genoa itself had fallen into the hands of Charles VI), and then the Corsican Vincentello d'Istria with Aragonese assistance captured all the island but Calvi and Bonifacio. The unsuccessful siege of the latter in 1420 by the Spaniards is one of the epics of Corsican history, although the city was held for the Genoese to whom it was loyal at all times. It had as a result a privileged position, and became a virtually independent republic under Genoese protection. The struggle between Genoa and Aragon continued with varying vicissitudes; Vincentello was finally captured and executed by the Genoese. Two papal expeditions in 1444 and 1446 captured a large part of the island, and in 1447 the Genoese Pope Nicholas V gave to Genoa his rights and the districts which his troops had occupied.

During the next 250 years followed a period of utmost confusion, of misery, bloodshed, intrigue, pestilence and poverty beyond comparison. At one time or another Corsica was held not only by Genoa, but also by Aragon, by the Popes, by Milan and by the Corsicans themselves. During the sixteenth century Moorish corsairs harried the coasts repeatedly.

In 1453, the *Terra di Commune* unwisely but despairingly offered the sovereignty of the island to the Bank or Company of San Giorgio, a powerful Genoese commercial corporation. It was not until 1511 that the Bank gained secure possession, having won its position by ruthless cruelty; its sole concern was the collection of stringent taxes, and it failed even to defend the coasts against the Barbary pirates. Unable to obtain justice, Corsicans often took the law into their own hands; this period is said to mark the beginning of the *vendetta*. Efforts by Corsican patriots to free the island were ruthlessly crushed. In 1553, Henry II of France attacked Corsica as part of the war against the Hapsburgs of Spain and Austria. He made a treaty with Suleiman the Magnificent, thereby obtaining the assistance of the Turkish fleet, and he was helped considerably by Sampiero, a Corsican patriot. After three years' confused fighting, all the island except Bastia was left in the hands of the French, who established a reasonable and acceptable form of government. But to the disappointment of the Corsicans, at the Treaty of Cateau-Cambrésis with Spain and Austria in 1559, France handed back the island to the Bank of San Giorgio, from which it was immediately taken over by Genoa. Sampiero refused to acquiesce and put himself at the head of a national revolt. In spite of failure to secure help from France and Turkey, Sampiero struggled on with his patriots, but soon after his death by ambush in 1568 the Corsicans were obliged to agree to a truce with Genoa. It was an intermittent peace of despair which lasted with minor interruptions for 150 years. The degree of autonomy which the French had established was withdrawn by Genoa, and the people were disarmed and helpless. Yet the Genoese failed to substitute any efficient system of government; the *vendetta* flourished, the Barbary pirates harassed the coasts to such an extent that many of the coastal villages were abandoned, and Corsica continued to be ruthlessly exploited.

In 1729 a large-scale rising began against the Genoese; soon the whole island except the coastal strong points was in the hands of the patriots. Genoa hired large forces of German mercenaries, yet the Corsicans fought so well that in 1732 a peace was signed which allowed Corsica its self-government, although it was to remain under the sovereignty of Genoa. But as a result of Genoese intrigue the Corsicans took up the fight again in 1733 under Paoli, father of the most famous of all Corsican patriots, and in 1735 a constitution was drawn up, although the Corsicans were far from complete victory.

In 1736, there occurred a strange theatrical episode. A German adventurer, Baron Theodore von Neuhof, landed on the island and was elected king of Corsica by an assembly of clergy and representatives of the communes. But without the foreign help for which he had hoped his position was untenable and he left in the same year, although he made several other abortive attempts.

In 1737, Genoa called for the assistance of France, who, fearing that Great Britain might seize the island, conquered it and established order, leaving the Genoese in nominal possession only. In 1741, French troops were withdrawn owing to the outbreak of the war of he Austrian Succession, and the struggle between Corsica and

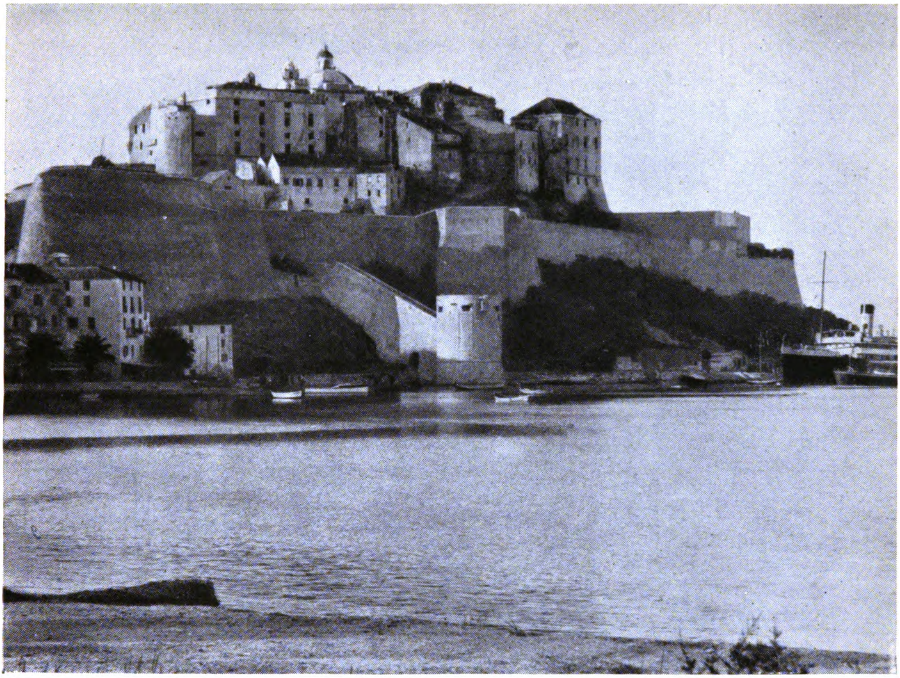


Plate 45. The *citadelle* at Calvi

Calvi was founded in 1268 and remained tributary to Genoa until Corsica was sold to France in 1768; it was given the title of *Semper fidelis* by the Genoese. The fortress was captured in 1794 by an English expedition under Admiral Hood; it was during the bombardment that Nelson lost an eye. Much of the old town was destroyed at that time and the ruins still remain within the walls; the new town has grown outside the *citadelle* along the waterfront (see Fig. 59).

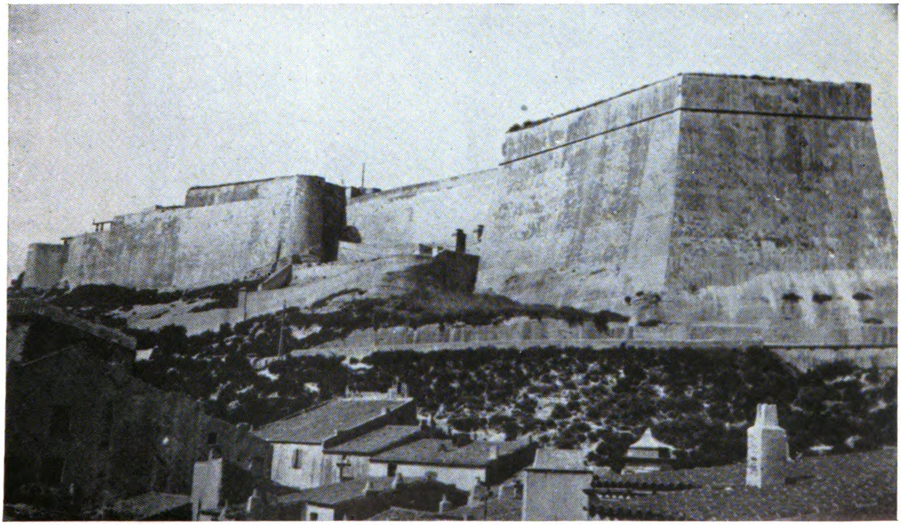


Plate 46. The *citadelle* at Bonifacio

Photograph taken from the shores of the bay near its head, showing the massive walls on the eastern side of the old town (see Fig. 62).

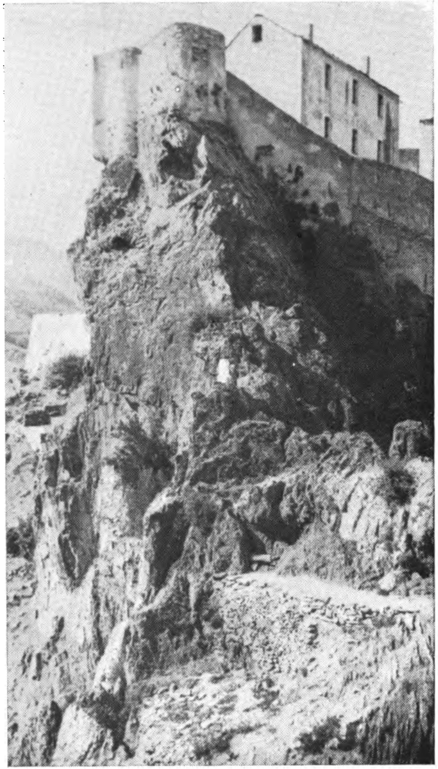


Plate 47. The *citadelle* at Corte

This fortress was built in 1419 on the summit of a rocky hill; the town has extended down the south-eastern slopes (see Fig. 40).

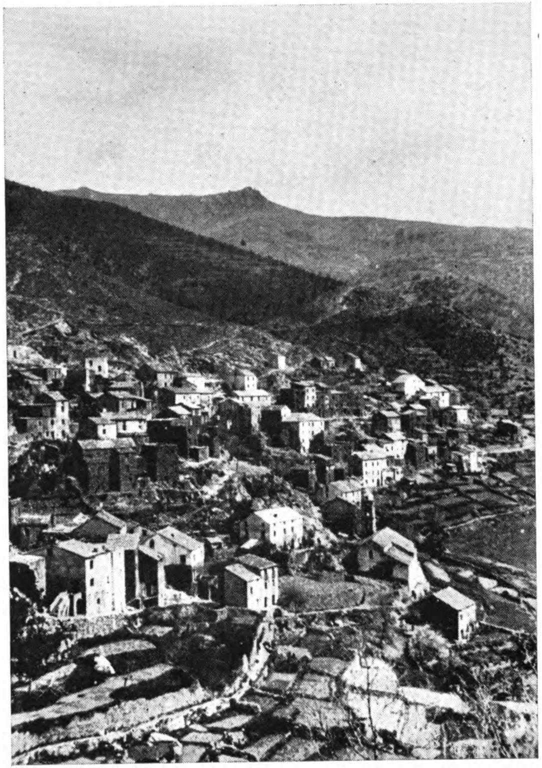


Plate 48. Asco

The village, of 600 inhabitants, clusters on the south-facing slopes of the Asco valley. Note the small terraced gardens surrounded by dry stone walls.

Genoa began again. It is noteworthy that in 1747 a British squadron and Sardinian troops helped the patriots, and captured Bastia and St Florent, although Bastia was later retaken on the withdrawal of the British. In 1747, a French expedition occupied the chief ports at the request of Genoa, which they retained until 1757, although at the Treaty of Aix-la-Chapelle in 1748 Corsica was assigned once again to Genoa. In 1755 the great Pasquale Paoli was proclaimed sole leader of the Corsican people and began his long struggle for freedom. After many vicissitudes, he conquered all the island except for the ports, which were still in French hands, and ruled it well. The French and Corsicans remained on amicable terms; indeed, the inhabitants of the French-occupied but still nominally Genoese towns sent representatives to the national parliament. Under Paoli the island became a model republic. Feudal rights were abolished, the *vendetta* was temporarily suppressed, education was encouraged (the university of Corsica was established in 1765), and agriculture was set on as sound a footing as the poverty-stricken condition of the country would allow.

In 1768, Genoa sold the sovereignty of the island to France. For a year Paoli resisted the powerful enemy, but his appeal to England met with no result; he gave up the fight in 1769 after a heavy defeat at Ponte-Nuovo and left the island. Three months later Napoleon was born at Ajaccio. In 1770, a general assembly swore allegiance to the French crown.

THE FRENCH REVOLUTION AND THE NAPOLEONIC WARS

For 19 years Corsica remained a dependency of the French crown, and most of the old institutions were retained. In 1790 it received departmental status and Paoli returned to be governor. He disliked the policy of the new order in France, and in spite of the fact that much Corsican opinion, including the powerful Bonaparte family, was in favour of France, he determined to revolt once more, and turned to England for assistance. England was the more ready to help because France had declared war on her, and she realized the need of naval bases in the western Mediterranean Sea. So Admiral Hood sent an expedition which landed at Ile-Rousse. In spite of divided command and counsel and of considerable inefficiency, Bastia, St Florent and Calvi were captured by combined land and sea operations. It is interesting to note that it was at the siege of Calvi that Nelson lost his eye by a splinter of stone during a bombardment. There was no further resistance, and Corsica was declared in 1794 to be part of the British Empire.

The British occupation lasted for two years, and was marked by repeated quarrels between the Governor, Sir Gilbert Elliott, and his military advisers, and by the failure of the English to co-operate with Paoli. In 1796, Napoleon finished his Italian campaign and prepared to retake the island. The British fleet was outnumbered in the Mediterranean by the French and Spanish fleets. It was therefore decided to evacuate the island, and Nelson's fleet removed the last of the garrison at Bastia as the French arrived. Paoli left the country and remained in England until his death.

The island was reoccupied by British troops for a short time in 1814, but at the settlement of 1815 it was returned to the French crown. It received full departmental status, and from that date its history has been part of that of France.

Corsica and Fascist Italy

After the war of 1914–18, the emergence of a militant Fascist Italy with territorial ambitions in the Mediterranean region revived once again the question of the ownership of Corsica. The annexation of the island has been a dominant feature of the irredentist policy of Italy. The *Enciclopedia Italiana*, in the course of its detailed study of Corsica, summarized the basis of Italian claims as follows: *Isola essenzialmente italiana per situazione e populazione, la Corsica, per natura geologica, clima, economia, demografia.* It is significant that much research on various aspects of Corsican geography, history, anthropology, language, etc. has been carried on by Italian universities, and that a large part of a guide published by the *Touring Club Italiano*, entitled *Italia Insulare Possedimenti e Colonie* (Milan, 1931), should be devoted to Corsica.

Italian propaganda consistently exploited two main lines. The first was the French neglect of Corsican economic development. As early as 1926 invidious comparisons were made with Fascist schemes in Sardinia. The new programme of public works in April 1941 aimed at removing some of the causes of complaint, but the British blockade impeded its realisation.

The second line exploited by the Italians was the Corsican autonomist movement, founded in 1920 under the name of the *Partito Corso d'Azione*, later changed to the *Partito Corso Autonomista*. Its weekly organ, *A Muvra*, written in the Corsican dialect (see p. 116), was started in May 1920. Italian propaganda increased to such an extent that its activities were described in a disturbing report to the French Senate in 1931. The 'Corso-Dalmatia Committee' was established in Leghorn, with an affiliated organization in Corsica. Such publications as the Corsican edition of the *Telegrafo* and the crudely subversive *Almanacco Popolare di Corsica* were fostered. Corsican 'Groups of Action' (*Gruppi di Azione Irredentista Corsa*) have been set up in Italy, and that country was the abode of most of the Corsican autonomist leaders, such as Petru Giovacchini and Bertino Poli. The 'Free Corsican Wireless Station', which in 1939 started to broadcast violent anti-French propaganda, was believed to be situated in Italy. In 1939, the autonomist paper *A Muvra* was suppressed and its editor charged with undermining French sovereignty.

These activities, however, affect a very small minority of the population, for since the time of Napoleon Corsica has become wholeheartedly French. There is a very marked anti-Italian sentiment, which may be a legacy of the bitter struggle against the Genoese. Outbursts of passionate hostility to Italy, which included the hanging of effigies of Mussolini and enthusiastic mass meetings manifesting loyalty to France, greeted the vociferous claims put forward in the Italian parliament (1938), M. Daladier's visit (1939), Italy's entry into the war, and the arrival of the Italian Armistice Commission. Remarkable mass demonstrations led to the departure of this Commission, and there is much evidence of continued attachment to France. It is certain that a plebiscite held in Corsica would overwhelmingly support its French connexion.

THE VICHY REGIME

The French-Italian armistice of 24 June 1940 provided that Ajaccio (together with Bizerta in Tunis) should be demilitarized within fifteen days, but actual territorial claims were to remain in abeyance until the final peace settlement. From June 1940 onwards there has been a stream of irredentist propaganda, produced by the 'Groups of Action', in the Italian press, and at meetings in Italy. Attention was however focused more on Nice than on Corsica, while occasional periods of quiescence may have been the result of efforts to draw France into closer collaboration with the European 'New Order'. In March 1942, propaganda grew more violent. During that month, a new periodical, *Idéa Corsa*, was published in Italy; in addition, Mussolini officially received the Corsican leaders of the 'Groups of Action', an intense irredentist campaign was prosecuted by means of the press, radio, public lectures, etc., and on 14 April an enthusiastic meeting was held in Genoa to support Italy's territorial claims. Corsica was described at this meeting as '*isola italianissima*' ('this most Italian island'), a catch-phrase originated by Mazzini in 1831.

On 7–8 November, American and British forces began to occupy French North Africa. This action was followed within the next few days by the entry of German forces into the formerly unoccupied zone of mainland France. Hitler, in a Note to Marshal Pétain, stated that he had ordered his troops to cross France to occupy the Mediterranean coast and '...to take part in the protection of Corsica against the impending aggression of Anglo-American armed forces...'. On 11 November, the Vichy news agency announced that Italian troops had entered Bastia, and a few days later it was reported that both the French garrison and the civil population of the island were offering resistance to the Italians, and that a state of siege had been declared in Ajaccio and in other towns.

Chapter VIII

THE PEOPLE

General Features: Urban and Rural Population: Altitudinal Distribution: Changes of Population: Foreign Population: Settlements and Houses: Racial Features: Banditry and the *Vendetta*: Language: Religion: Education

General Features

The *légale* total of the population of Corsica in 1936 was 322,854;* there were in addition 19,848 foreigners permanently resident. The mean density over the island was 37·0 per sq. km. Over the whole of France, which includes Corsica for administrative purposes, the mean density was 76·1 per sq. km. The distribution of population by arrondissements was as follows:

	Total	Av. per sq. km.
Ajaccio	91,499	41·7
Bastia	122,393	55·3
Corte	55,637	22·4
Sartène	53,325	30·2

Source: Statistics used in this and in subsequent tables were taken from the *Annuaire Statistique* and from *Didot-Bottin* for various years, except where otherwise stated.

The distribution of population by cantons is given in the table on p. 193. The much higher densities of the first two arrondissements are the result of the large population which lives in the two chief towns of Ajaccio and Bastia. Fifteen departments had averages less than that of Corsica, the lowest of all being Basses-Alpes (12·2 per sq. km.) and Hautes-Alpes (15·6 per sq. km.).

Urban and Rural Population

In 1936, 128,293 people were classified as urban dwellers and 194,561 as rural, i.e. the rural population was 60 % of the total. The corresponding percentage for all France was 48. Over 75,000 people, about 59 % of the urban and 23 % of the total population, lived in the two main towns of Bastia and Ajaccio; their respective populations were 50,430 and 35,813. Only ten other communes had urban populations over 2,000. The largest of these were Corte (5,042) and Sartène (4,307), the two other sub-prefectures. The fallacious classification of urban and rural dwellers is illustrated by the commune of Bastelica, which was returned as having a population of 4,030 classified as 'urban' dwellers; actually it comprises six individual hamlets, none of which is called Bastelica. Another example is Morosaglia, which consists of seventeen hamlets. There were altogether fifty-seven communes, each with a total population over 1,000, and another 100 communes had a total of over 500 inhabitants. The following table analyses the numerical size of the 364 communes in detail:

---

* A confusing feature of official French population statistics is that two figures are published. One is the *légale* total, the number of people habitually resident in a place; the other is the *présente* total, the number living in a particular place on the night of the census. The two may differ as much as 5 %. *Légale* is used here unless the opposite is stated.

No. of inhabitants in commune	Arrondissements				Total
	Ajaccio	Bastia	Corte	Sartène	
Under 100	1	2	5	1	9
100–200	6	15	25	2	48
200–300	6	25	16	5	52
300–400	7	11	7	7	32
400–500	3	11	4	1	19
500–750	35	39	33	12	119
750–1,000	9	10	6	3	28
1,000–2,000	11	11	11	9	42
2,000–3,000	0	2	0	3	5
3,000–4,000	0	1	0	2	3
4,000–5,000	1	0	0	0	1
5,000–10,000	0	0	1	2	3
Over 10,000	1	2*	0	0	3
Total	80	129	108	47	364

* The two communes of Bastia-Terranova and Bastia-Terravecchia make up the town of Bastia.

A confusing feature of French population statistics is that in addition to the distinction between 'urban' and 'rural', there is a further grouping into (*a*) the 'agglomerated' or grouped total, and (*b*) the 'dispersed' total, or the number living away from the main nucleated centre of the commune. This second classification, however, enables a survey to be made of the number of scattered and isolated dwellings. Thus although fifty-seven communes each had a total population over 1,000, only thirty-seven had an 'agglomerated' or 'nucleated' population over that figure (Fig. 34, and see table, Appendix III, pp. 194–5).

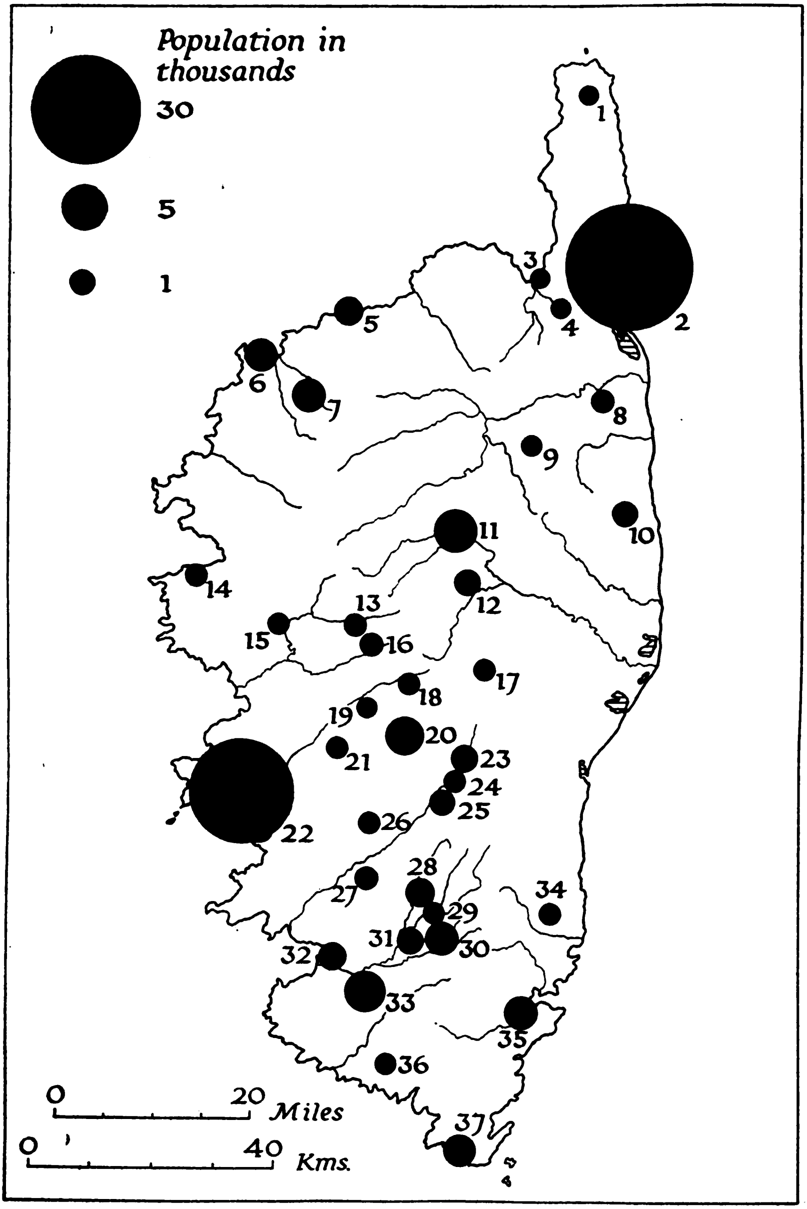


Fig. 34. Towns and large villages with an agglomerated population of more than 1,000 inhabitants, 1936

The area of each circle is proportional to the number of inhabitants, obtained from *Didot-Bottin* (Paris, 1939). The centre of each circle is the approximate mid-point of the settlement. The figures correspond to the table, Appendix III (pp. 194–5). Apart from the dominance of Ajaccio and Bastia, the most striking feature is the large number of towns and villages in the centre of the island.

Only nine communes with agglomerated populations exceeding 1,000 occur on the coast, because of its relative inhospitability. Most of the coast is rocky and cliff-bound, and settlements are confined to the heads of the few bays where swampy deltas are absent; while a large part of the east coast is marshy and malarial. There is also an historical reason; villages were built some distance inland for reasons of security; beacon warning was given by watchmen in coastal towers at the approach of Barbary pirates and the inhabitants took temporary refuge in the hills. The majority of the inland communes are strung along the western valleys of the Liamone, the Gravone, the Taravo and the Rizzanèse, and in the eastern uplands of the *Chataigneraie*.

The percentage of the population living in dispersed habitations in Corsica is plotted on a cantonal basis on Fig. 35. There were 66,803 people so classified, that is, 27 % of the total population of the island, distributed among the arrondissements as follows:

	Total dispersed	% dispersed of total population
Ajaccio	12,662	13·8
Bastia	23,624	19·3
Corte	14,591	26·2
Sartène	15,926	29·9

The main areas of dispersed population are in the south-east and south, in the centre and in parts of Cap Corse.

From an inspection of Fig. 36, which shows the number of people per sq. km. in 1931, calculated upon the basis of the area of each commune, four main features emerge:

(1) Three areas of dense urban and semi-urban agglomerations (Bastia, Ajaccio and Ile-Rousse) stand out. The only other area with an average density of over 200 people per sq. km. is in the *Balagne* south of Ile-Rousse, where a population living in a large number of neighbouring villages has based its economy upon the intensive cultivation of olives, vines, cereals and other Mediterranean products.

(2) Small areas with an average of from 60 to 200 people per sq. km. occur in the more fertile parts of the valleys and at occasional places on the coast. The largest of these is the *Chataigneraie*, where numerous villages are situated among the chestnut woods. The settlements are sometimes strung out along the smooth grassy slopes above the forests, sometimes on the intermediate slopes of the upland basins below the sides of steeper ridges, but rarely in the deep narrow

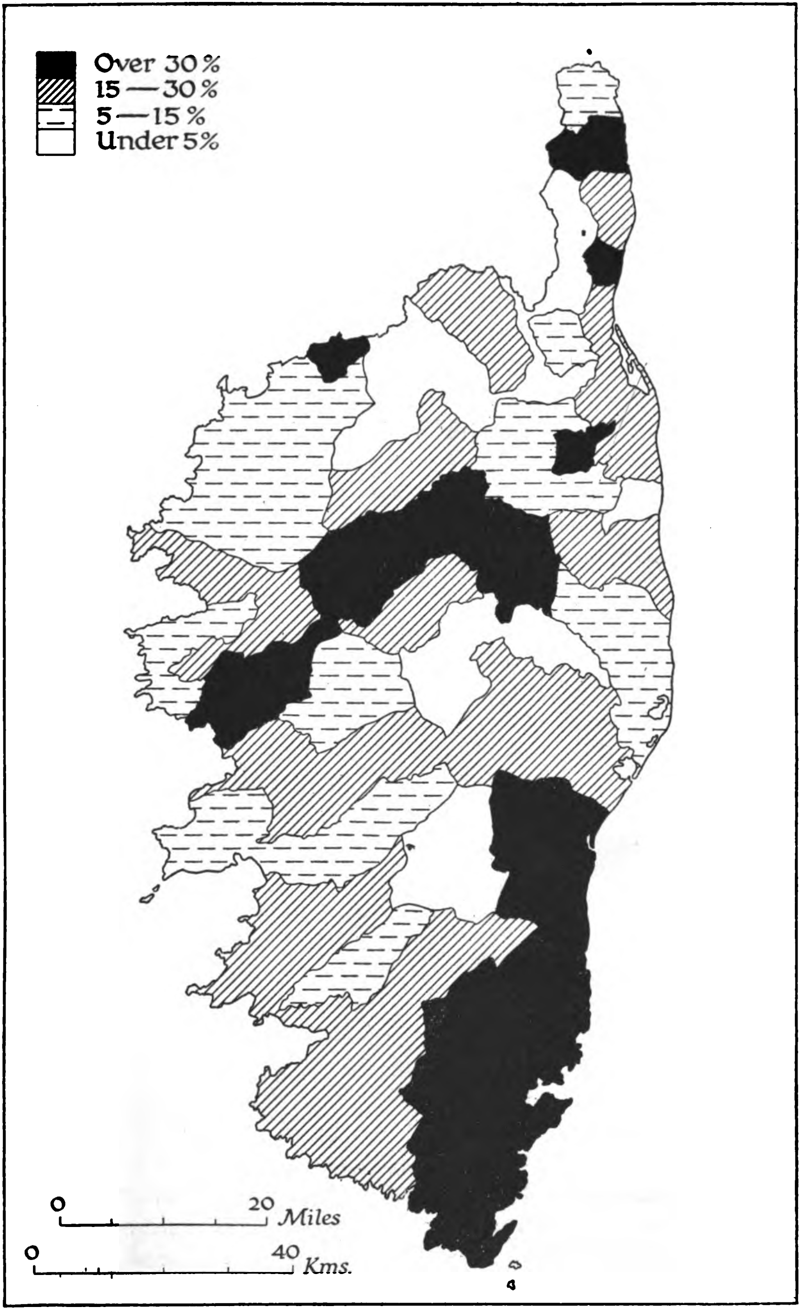


Fig. 35. Percentage of population by cantons living in dispersed hamlets or in isolated dwellings, 1936

Based on statistics from *Didot-Bottin* (Paris, 1939).

7-2

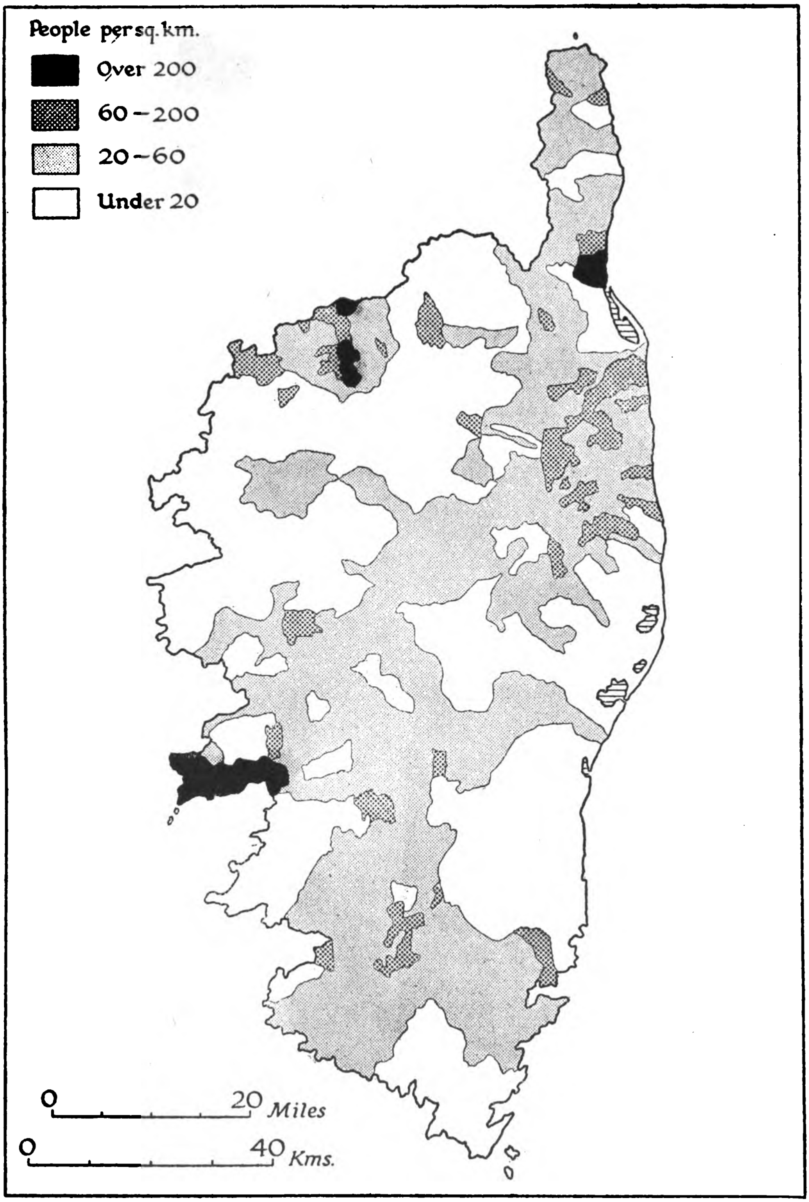


Fig. 36. General distribution of population by communes, 1931
Based on the *Atlas de France*, Plate 75 (Paris, n.d.).

valley bottoms. Another area with a similar density is Cap Corse, which has numerous hamlets in the upland basins; the inhabitants depend upon intensive cultivation, chiefly of the vine.

(3) Nearly one-half of the country has an average population of from twenty to sixty inhabitants per sq. km., scattered in small hamlets, groups of which form communes. Their economy depends upon the small-scale cultivation of Mediterranean fruits and of cereals and vegetables, upon the exploitation of forest products and upon milk products from the sheep and goats.

(4) The rest, that is, nearly half of the country, has a density less than 20 per sq. km., and much of it has no population at all. The empty area of rugged mountains stretching across the island from north-west to south-east is clearly shown on Fig. 1. Other sparsely populated regions are the rugged peninsulas on the west and south coasts, the swampy malarial parts of the east coast, and the completely uninhabited upland of Agriates west of the Golfe de St Florent.

ALTITUDINAL DISTRIBUTION

It is of some interest to consider the distribution of population in relation to the height of the land above sea level. The predominantly mountainous character of the island results in a series of zones of climate and vegetation, which vary from sub-tropical to alpine (see pp. 67–74), and the possibilities of settlement are thus very varied.

Fig. 37 shows the distribution of population in 1936 by zones of altitude, and for comparison the distribution 25 years previously. The island is divided into two parts, north-east and south-west, which reveal distinct differences in the altitudinal distribution of their inhabitants. The north-east comprises the arrondissements of Bastia and Corte, and is known as the *Banda di Dentro*; the south-west comprises those of Ajaccio and Sartène, known as the *Banda di Fuori*. They are separated by a diagonal zone of almost uninhabited mountains (Fig. 1). The third graph is of the *Chataigneraie*, a region with special features. In calculating the graphs, the population of each 100 m. altitudinal zone is taken to be the sum of the population of all communes which have their nucleated centre within the zone. The calculated population per sq. km. is plotted on the graphs at the mid-point of each zone.

In the graphs for both the north-eastern and south-western sections the zone between sea level and 100 m. is by far the most densely

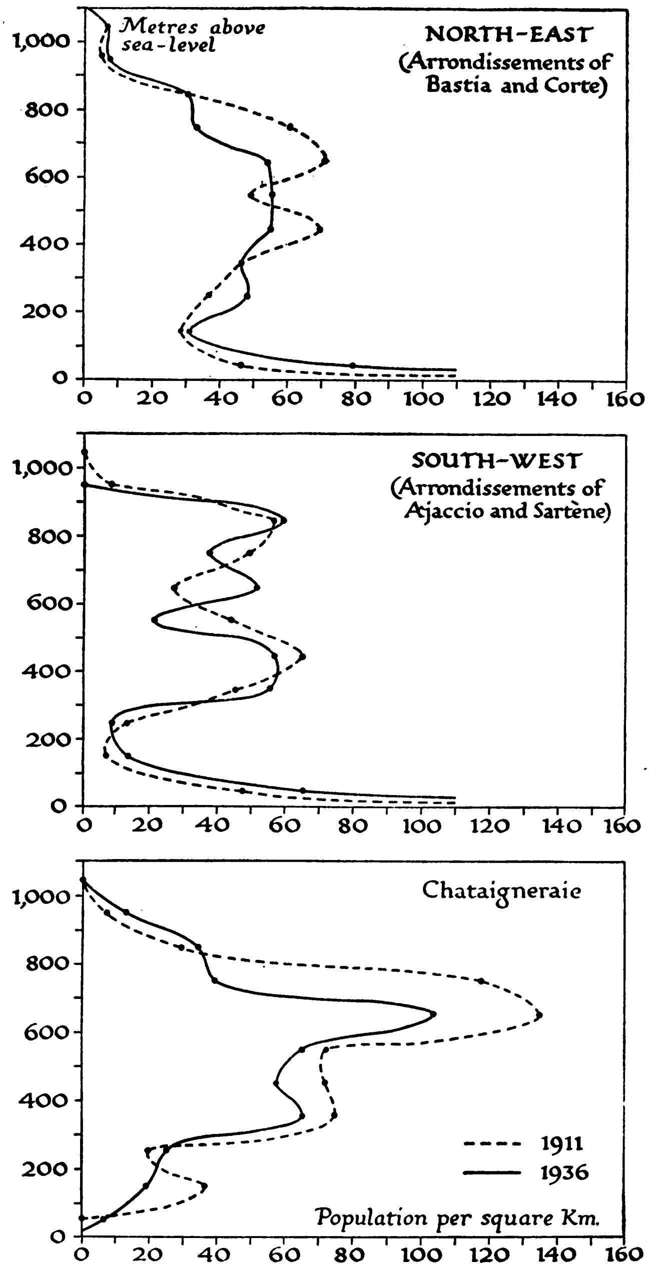


Fig. 37. Altitudinal distribution of population in north-eastern and in south-western Corsica, and in the *Chataigneraie*

The last, delimited on Fig. 14, consists of cantons between the rivers Golo and Tavignano. Population statistics were obtained from *Didot-Bottin* (Paris, 1912 and 1939). The areas in sq. km. between each 100 m. contour were obtained from tables in M. G. Anfossi, *Revue de Géographie Alpine*, vol. VI, p. 58 (Grenoble, 1918).

populated. This is due almost entirely to the large populations of Bastia, Ajaccio and a few smaller coastal towns; apart from these towns, the zone between sea level and 100 m. is almost unpopulated for reasons stated on p. 79, as shown in the third graph of the *Chataigneraie*, where there are no coastal settlements.

In the south-west there are several distinct zones of denser population; these are at 300–500 m., at 600–700 m., and at 800–900 m., corresponding to the settlements in the middle and upper valleys and on the slopes of intervening ridges. In the north-east, the population is fairly evenly distributed between 300 and 700 m., due to the fusion of several optimum zones. In the *Balagne* the great bulk of the people live between 300 and 500 m. (in places attaining a density of 100 per sq. km.), in Cap Corse the settlements occur from 400 to 600 m., and in the *Chataigneraie* there is a dense population between 600 and 800 m. This is brought out strikingly by the third graph.

Only three communes are situated at altitudes greater than 1,000 m.; these are Pioggiola (arrondissement of Bastia), which has 513 inhabitants, Lozzi (arrondissement of Corte), which has 1,185 inhabitants, and Mazzola (arrondissement of Corte), which has 313 inhabitants.

CHANGES OF POPULATION

Between 1870 and 1936 the population of Corsica rose from 258,507 to 322,854 (Fig. 38), showing an increase of about 25 %. The total increase in all France for the same period was about 13 %.

Inequalities in the growth of population within any country result from (1) differences in the excess or deficit of births compared with deaths, that is, natural increase or decrease, which of course may be sharply disturbed by war-time losses, (2) internal migration between different localities within the country, and (3) emigration to foreign countries. The absolute total may also be considerably affected by immigration from other countries (see pp. 76–7, where the vital statistics are described in detail).

Since 1890, France, alone among European countries, has experienced several years when the number of deaths exceeded births, including the period 1935–8. The Corsican figures however have long shown an excess of births, except during the years of the war of 1914–18. The absolute increase and the increase per 10,000 of the population in Corsica between 1923 and 1938 are given in the

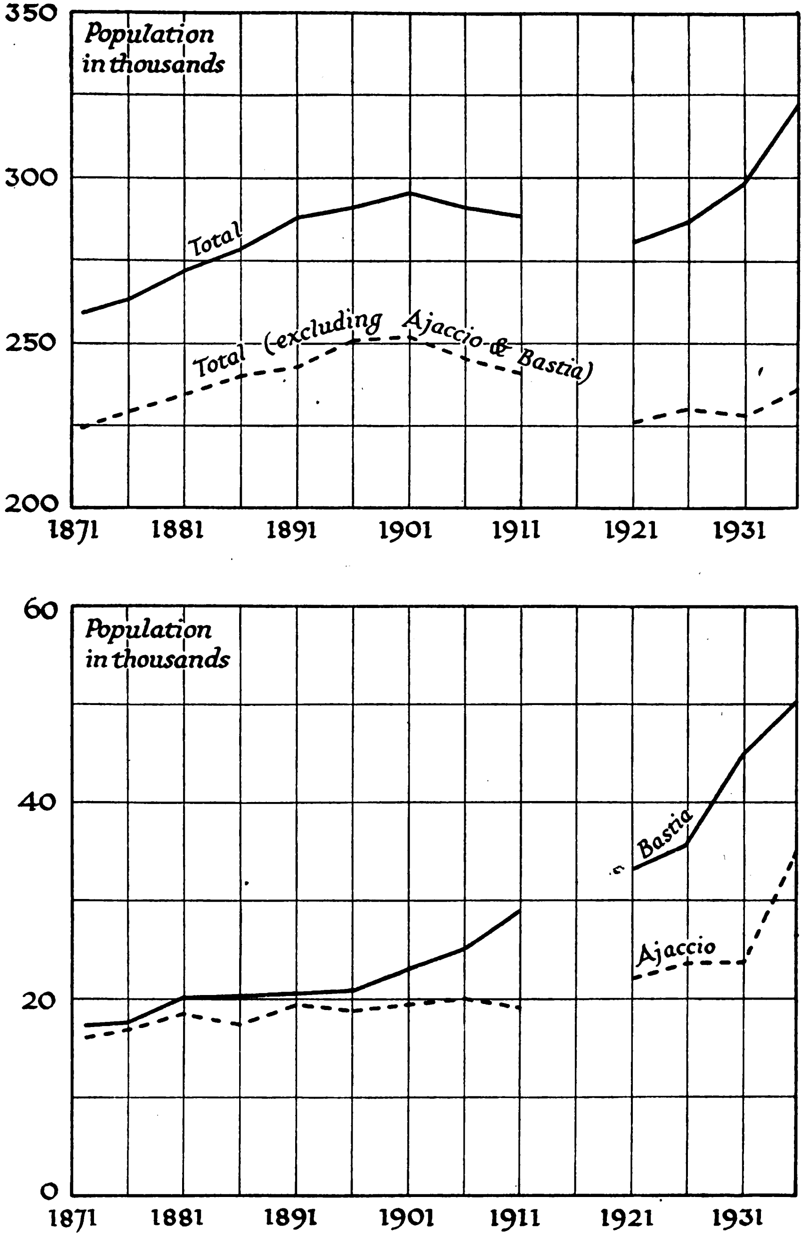


Fig. 38. Graphs to show population changes, 1870–1936, in Corsica (above) and in Ajaccio and Bastia (below)

The first census shown on the graphs was taken in 1872 instead of 1871, because of the Franco-Prussian war; there was no census in 1916.

Figures were obtained from the *Annuaire Statistique* (Paris) for the respective years.

following table; the figures for all France are appended for comparison:

Year	Corsica		France Per 10,000
	Absolute change	Per 10,000	
1923	+1,125	+40	+24
1924	+776	+28	+18
1925	+709	+25	+15
1926	+480	+17	+13
1927	+348	+12	+16
1928	+386	+13	+17
1929	+351	+13	− 2
1930	+680	+23	+24
1931	+361	+12	+13
1932	+545	+18	+15
1933	+667	+22	+ 4
1934	+509	+17	+ 8
1935	+234	+ 7	− 4
1936	+411	+13	− 3
1937	+466	+14	− 3
1938	+259	+ 8	− 8

+signifies excess, −deficit, of births compared with deaths.

In 1938, sixty-five departments of France showed a deficit of births compared with deaths, and the total deficit was 34,741. The Corsican natural increase of 8 per 10,000 inhabitants contrasts with an average decrease of 8 over the whole of France. In addition to this natural change, there was a great loss of active male population during the war of 1914–18. France suffered a greater proportional loss than any other country, and Corsica, who lost over 40,000 men killed, or nearly one-seventh of the total population, suffered more than any other part of France.

The second factor, emigration to other parts of France, is a considerable one as far as Corsica is concerned. Large numbers of Corsicans have migrated to the Mediterranean departments of mainland France, where they occupied positions such as *gendarmes*, postmen, etc., and there are large numbers in the army. It is estimated that there are over 600,000 people of direct Corsican origin alive at the present time, of whom only one-half are in their native island, while another 130,000 live in mainland France and North Africa.

Emigration to other countries affects a relatively small number of Corsicans. A few people, mainly from Cap Corse, spend a number of years in the United States, in South America or in the West Indies, but they nearly always return to their native island and thus affect absolute population totals very little.

The actual trend of population from 1870 to 1936 is shown in Fig. 38. There was a steady increase until 1901, when a total of 295,000 was reached. Partly because of emigration to the mainland during the first decade of the twentieth century, then because of the war losses, this figure was not again attained until 1931. The most marked increase during the whole period was in the five years 1931–6, when there was a rise of over 15,000.

The following table summarizes the differences in population by arrondissements between the years 1906 and 1936:

Arrondissement	1906	1936	Absolute change	% change
Ajaccio	78,702	91,499	+12,797	+16 %
Bastia	107,050	122,393	+15,343	+14 %
Corte	60,179	55,637	− 4,542	− 7 %
Sartène	45,229	53,325	+ 8,096	+18 %
Total	291,160	322,854	+31,694	+11 %

The most significant change is the growth of the two towns of Bastia and Ajaccio, as shown in the following table and on Fig. 38:

Towns	1906	1936	Absolute change	% change
Ajaccio	22,264	36,582	+14,318	+64 %
Bastia	27,865	52,208	+24,343	+87 %
Total	50,129	88,790	+38,661	+77 %

The more marked growth of Bastia is due to its commercial activity; Ajaccio is the administrative and tourist centre.

The rapid growth of these towns, especially since 1921, contrasts markedly with, and is largely responsible for, the decrease in the remaining population of the island. The percentage change over the same period on a cantonal basis is shown on Fig. 39. It will be seen that there have been great fluctuations, as only three cantons have changed less than 2·5 % either way. Of the remainder, nineteen show an increase and forty-one show a decrease. Apart from the cantons in which Bastia and Ajaccio are situated, the most notable increases were in the cantons of Porto-Vecchio (35·7 %), Sartène (27·9 %), and St Florent (25·1 %). Cantons with marked decreases were Muro (33 %), Brando (32·5 %), and Castifao (30·9 %). This decrease over two-thirds of the island is part of the movement of rural depopulation which is taking place throughout Europe. It is

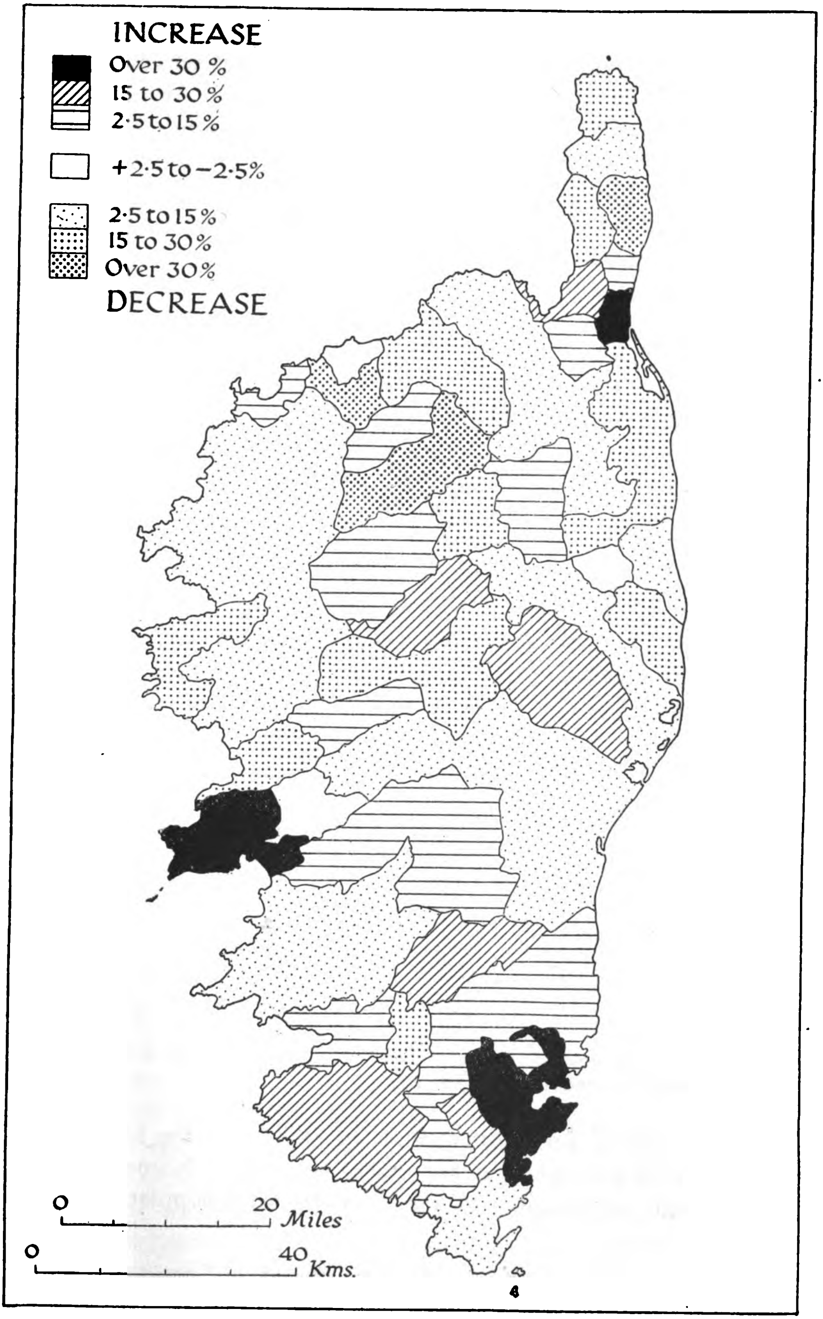


Fig. 39. Percentage population changes by cantons, 1906–36
Based on statistics from *Didot-Bottin* (Paris, 1912 and 1939).

significant that many of the areas of the mainland which have experienced a decline (notably the departments of the Alps, Pyrenees and Central Massif) are, like Corsica, of a mountainous nature. In these districts a hard struggle has frequently been given up in favour of a town life. The graphs of altitudinal distribution (Fig. 37) show the same absolute decline, and, especially in the north-east of the island, a general movement downhill.

Foreign Population

The numbers of the *légale* foreign population in Corsica at the times of the various censuses were as follows:*

	Total	% of total population
1921	6,478	2·39
1926	8,612	2·82
1931	10,217	3·54
1936	19,848	5·78

In 1931, the last year for which detailed statistics of the foreign population are available, the chief foreign elements of the population were as follows:†

	Male	Female	Total
Italians	5,241	2,652	7,893
French North Africans	613	5	618
Russians	122	20	142
Spaniards	47	42	89
English	38	32	70
Germans	38	15	53
Czechs	26	12	38
Belgians	18	14	32
Others	343	303	646
Total	6,486	3,095	9,581

Source: *Résultats statistiques du recensement général de la population en* 1931, *tome* 1, 5^e *partie*, *Étrangers et naturalisés* (Paris, 1936).

The overwhelming predominance of the Italians in the foreign element of the population can be clearly seen; they formed 82·4 % of the foreign population and 2·3 % of the total population of the island.

---

* Figures of foreigners in the individual departments of France are available only from 1921.

† These figures are *présente* (see p. 95), the form in which totals of foreigners in each department are given.

It is interesting to examine the manner in which the foreigners were employed in 1931, as indicated in the following table:

Agriculture and forestry	2,769
Manufactures	1,510
Public services	645
Commerce	396
Transport	354
Domestic service	159
Professions	98
Mines and quarries	51
Total actively employed	5,982

The Italians form nearly half of the total paid agricultural labourers in Corsica (see pp. 120–1). In addition to these permanent workers, a large number come over each year for the grape and olive harvest; the majority come from Lucca. They work for about six months, live frugally and return to Italy with most of their earnings. Before the war of 1914–18 about 50,000 Italians came every year, but immigration laws now restrict the total to 20,000. Other Italians find work as charcoal burners (*carbonari*), as workers in the tobacco factories and olive-oil refineries and in many forms of manual labour.

SETTLEMENTS AND HOUSES

In 1936 there were 36,207 inhabited houses in Corsica. This figure does not include roughly built *cabanes*, *casaroni* and *bergeries* in the high valleys which are inhabited only by shepherds during the summer months (Fig. 31). On an average, therefore, just under ten persons lived in each dwelling. There were 62,855 families, which shows that the majority of houses sheltered more than one family.

The completely isolated house far from any neighbour is rare. The most usual settlement is a series of small clusters of houses; the total diameter of a large village consisting of a number of these clusters may be more than 5 km., while a single cluster may form an individual hamlet on a steep hillside or in a forest clearing (Plates 48–9, 50). At Corte (Fig. 40) and at Tolla (Fig. 41), for example, the houses are built on steep rocky slopes, with the roof of one house almost touching the foundations of the one above. Beyond this general description it is impossible to analyse in detail any dominant type of settlement; individualism and particularity, together with the varied relief, have produced many different patterns.

There is, however, a marked difference between old and new parts of some of the larger towns, notably Ajaccio and Bastia, and to a less marked degree Sartène, Corte and Bonifacio. The old town (usually known as the *vieille ville* or even the *cité primitive*) has narrow streets flanked by tall buildings, the upper parts of which often overhang or are joined by arches. The streets may be roughly paved, cobbled or stepped, while sidewalks and gutters are frequently non-existent (Figs. 42, 43). The contrast with the tree-lined *places* and *boulevards* of the newer parts is striking (Plates 53–4). At Ajaccio, for example, the old town huddles on the promontory behind the Citadelle, while the new town is laid out along the waterfront and along the two main streets, the Boulevard Grandval and the Cours Napoléon, which lead into the Place du Diamant. At Bastia, the old city (*ville haute*) is situated behind the Vieux Port (Plate 46); it has been described as '...un inextricable dédale de rues et de ruelles s'enchevêtrant et se croisant dans un désordre pittoresque...'. The new town (*basse ville*)

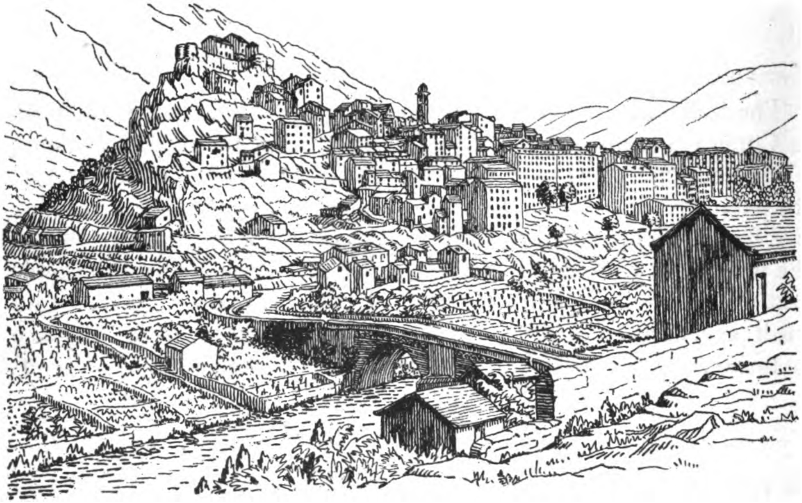


Fig. 40. Corte, viewed from the south (drawn from a photograph)

This town, the sub-prefecture of the arrondissement of the same name, is situated in the heart of Corsica, and for a short time (1755–69) was the capital of the island. The old town, or *ville haute*, clusters round the south-eastern slopes of a rocky hill, on the summit of which is the *citadelle*, built in 1419; on the west is a precipitous drop of over 100 m. to the Tavignano. This river (seen in the foreground) is joined by the Restonica some 200 m. to the right of the bridge; below the confluence is the railway station. The new town, or *basse ville*, part of which can be seen on the right of the picture, is strung out along the main Ajaccio-Bastia road, which skirts the eastern side of the old town.

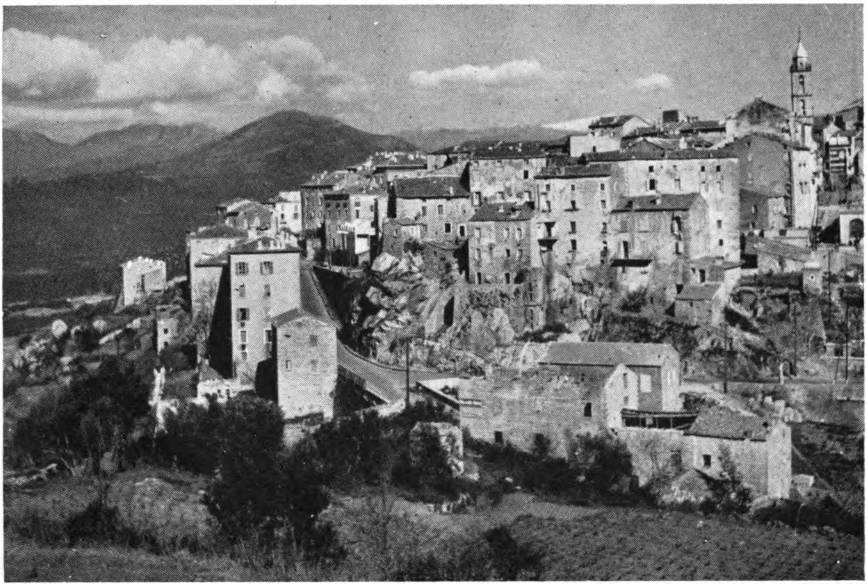


Plate 49. Sartène

The town is built in a series of terraces on the hill-sides above a tributary of the Rizzanèse (see also Plate 13).

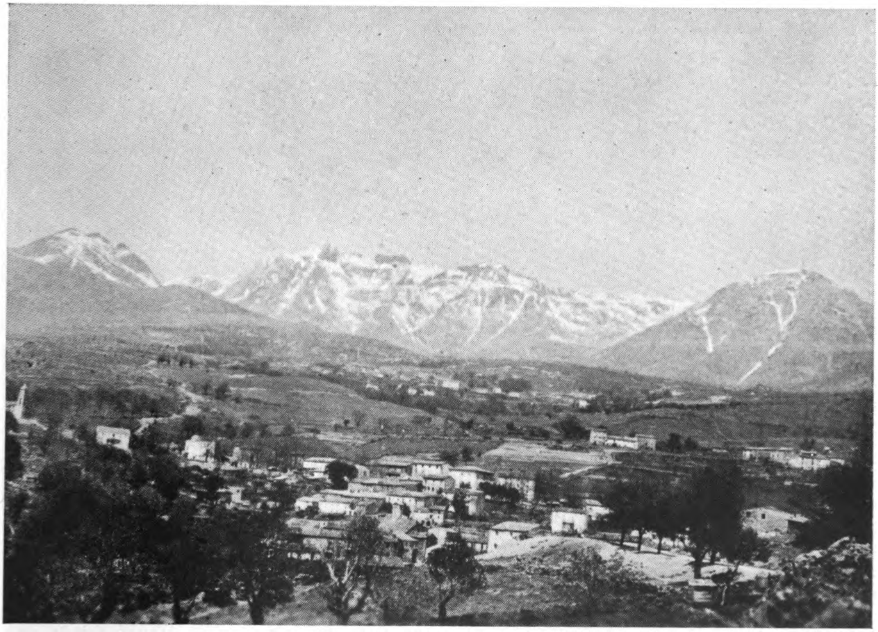


Plate 50. Calacuccia

The upper valley of the river. Golo forms a broad undulating depression (the *Niolo*), separated from the 'Central Furrow' to the east by the deeply cut defile of Ste Reine. The chief commune in the *Niolo* is Calacuccia, situated in the centre of a basin almost surrounded by peaks. The summit peak of the snow-covered central mass in the distance is Mt Cinto (2,710 m.).

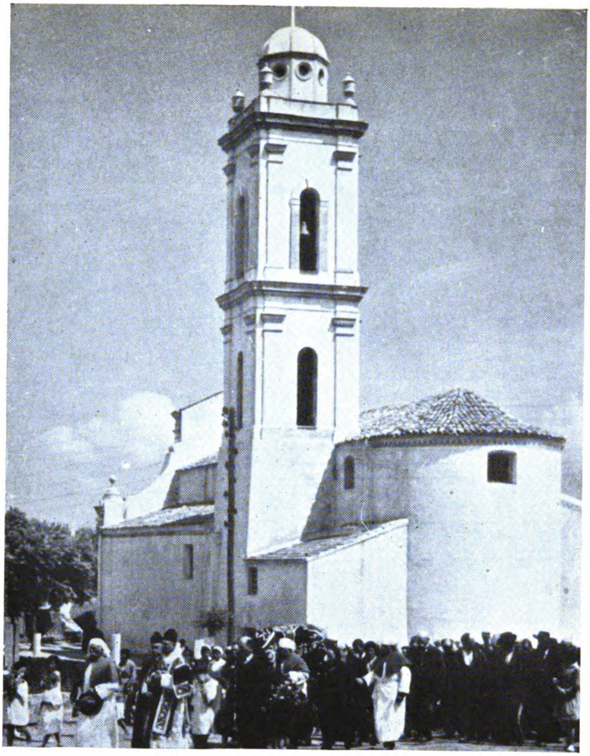


Plate 51. The church at Piana

A Romanesque church of this type, with its tall white tower surmounted by a minaret or dome, is a prominent feature in almost every Corsican town and village. In the foreground is a funeral procession.

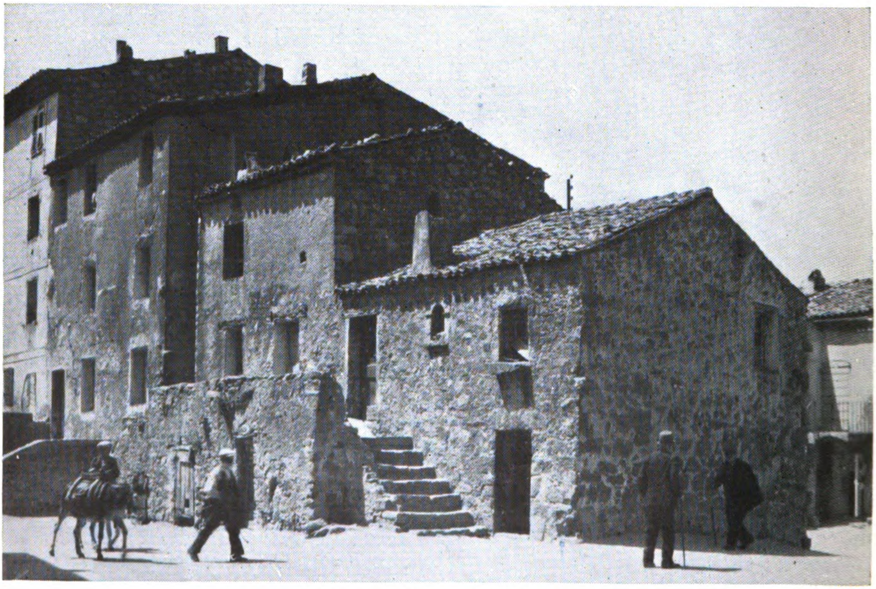


Plate 52. Houses at Piana

Most Corsican houses are solidly built of large roughly hewn blocks of granite.

has been built in spacious blocks round the Place St Nicolas and along the Boulevard Paoli (Plate 54).

The actual types of house in Corsica have been influenced by both historical and geographical factors. The numerous invasions and occupations of the island have produced locally features of Provençal, Genoese, Spanish and Moorish architecture; a Romanesque tower with a dome or minaret is usually the most prominent feature in a village (Figs. 40, 41 and Plates 49, 51). Needs of defence, both against invaders and against local enemies waging *vendettas*, have produced some tall, well-fortified buildings. The general height of the buildings is striking (Fig. 40, Plates 49, 52); four or five storeys in addition to a basement are quite common, and in places there may be eight or nine. There are numbers of buildings erected solely for defence, such as the ninety-one Genoese round towers on the coasts (Fig. 19, Plates 18, 19), and the square forts, or citadels with turrets and embrasures; notable examples of the latter are at Aléria, at Calvi, at Corte and at Bonifacio (Plates 45–7). In most cases these citadels are built on prominent rocky eminences with a cluster of houses below (Fig. 40). Occasionally a high embattled wall surrounds the village. There has been little or no Corsican art and houses are rarely decorated, as in other mountainous districts in the French and Swiss Alps. There are few wooden houses of the Alpine chalet type, for there are plentiful supplies of good stone. Most houses therefore are made of great roughly quarried blocks of stone, sometimes well cemented, sometimes with the interstices filled with clay. There is little or no slate in the island; the roofs are of wooden slats, sometimes covered with beaten clay, or of tiles, especially in the newer parts of the towns, or of roughly hewn stone slabs; sometimes they are thatched, occasionally they are covered with sheet iron. Windows are numerous. There are no attempts at decoration, and the general effect is sombre. The ground floor is often the stable or byre; wine and potatoes are stored in the basement and grain and vegetables in the attic. The rest of the house is inhabited by several related families. In the higher mountain villages there is often an outside staircase and wooden balconies. In the extreme south the houses are made mostly of limestone. A striking feature there is the well-shaft which goes through the house, pierced at each floor by a hole.

The houses of the east coast plain are exceptions to the general type of Corsican architecture. There are numerous isolated one-storey houses along the roads and in the fields, made of yellow-washed brick or baked mud, and roofed with rough clay tiles. Beside them are stables, made of stone or wood, and thatched. North of the Alesani valley along the coast plain the houses are low and elongated, with large stables. Sometimes they resemble mainland farms; rough-cast or daub buildings are joined to huge thatched stables opposite by high walls and big wooden gates, thus enclosing a courtyard.

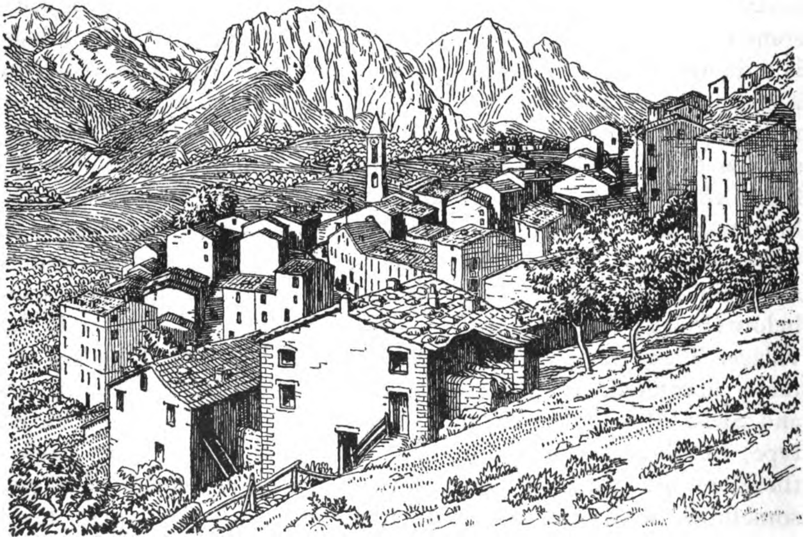
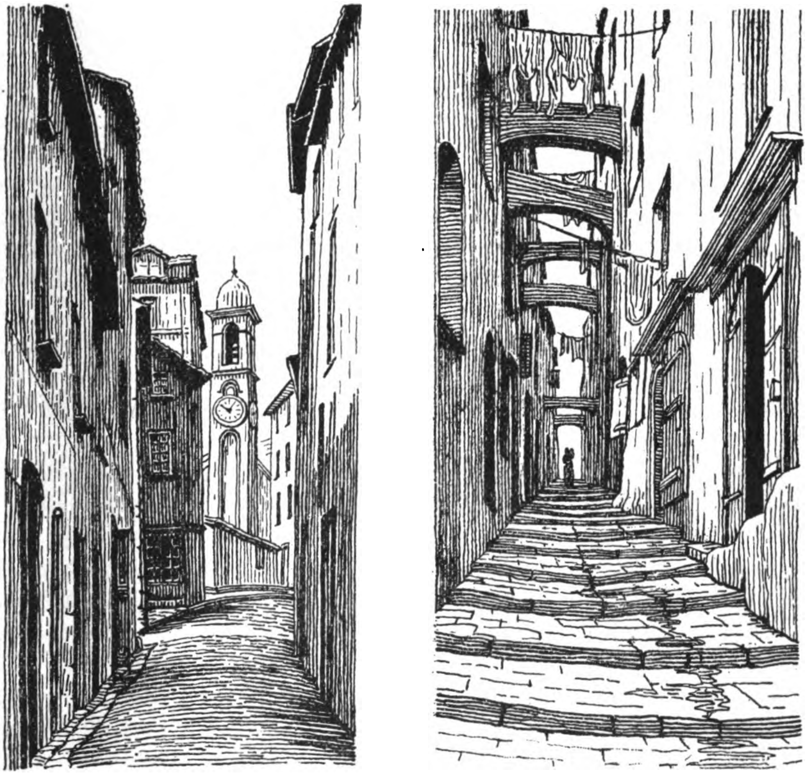


Fig. 41. Tolla (drawn from a photograph)

Tolla, a village of some 700 inhabitants, is situated at a height of 615 m. in the upper Prunelli valley. The irregular huddle of several-storeyed buildings and the Romanesque church with a tall tower are characteristic features of most Corsican villages and small towns.

Two other unusual features of Corsican settlements merit special mention. Except in the larger towns, houses are seldom equipped with internal means of cooking. Nearly every village has one or more outside ovens; some are communal and are used in turn by groups of families, others are owned by a single family. The oven is roughly built of stone blocks; it is filled with *maquis* and the fire allowed to burn for some time until the stones are heated through. Lumps of dough made of wheat, chestnut or maize flour, are put on the hot floor to bake.

Outside each group of houses are a number of vaults or small chapels where the dead are placed. Only the poorest people do not own a family mausoleum. These private vaults are sometimes grouped in cemeteries, which occupy a large area of valuable land, as is the case west of Ajaccio. Frequently a small flat-roofed building can be seen; it is an *arca*, or communal vault for poorer people. Bodies were merely pushed through a hole in the roof. The *arca* are no longer used, but many are still standing.



Figs. 42, 43. Streets in Corte (left) and Bastia (right)
(drawn from photographs)
The streets in these drawings contrast markedly with those in the newer parts of the larger cities (compare Plates 53–4).

RACIAL FEATURES (Plates 55–7)

At the beginning of Neolithic times the lands around the Mediterranean Sea were peopled by a race of long-headed people of rather short stature; they are known generally as the 'Mediterranean type'.

Remains of this Neolithic race have been discovered at many localities in Corsica, including Bonifacio, Mutola, Vizzavone and Gresso. From this common stock evolved the Spaniards, Berbers, Italians, etc. In the mountainous islands of Corsica and Sardinia the strain preserved a strikingly pure ethnic identity, in spite of the numerous invasions and the fact that they were under foreign domination for so much of their history. Some authorities maintain that with the Berbers of the Atlas, the Guanches of Teneriffe and the Basques of the Pyrenees, the Corsicans constitute the purest surviving types of the Mediterranean stock. The main reason for this has been the strictly endogamous marriage system, that is, marriage within a group of related families. Anthropometric studies show that the physical characteristics are strikingly uniform. The average stature is 163 cm. and variations from this are small; the head is long in shape, and the hair is dark brown (56 % of the population) and black (34 %); shades ranging from medium brown to blond are under 10 % of the total population. The coastal population, especially in the north and west and in the towns, is slightly taller and less long-headed than in the more isolated interior valleys. In Bocognano, for example, on an average more than a third of the recruits summoned for military training are rejected because their height is under the minimum 154 cm.

There are two exceptions to this general description. One is the colony of Greeks at Cargèse, descendants of 730 Peloponnesian Greeks who settled there at the beginning of the eighteenth century; the group has preserved its identity. The other is in the remote region of *Niolo* (upper Golo valley), which is relatively difficult of access. Here is found a closely inbred local group of a tall, long-headed, blond people; the fair complexion, fair or light chestnut hair, and light blue or greenish blue eyes are exceptional in the Mediterranean, and show that the people are of Nordic extraction. They are obviously a small survival group of unknown origin.

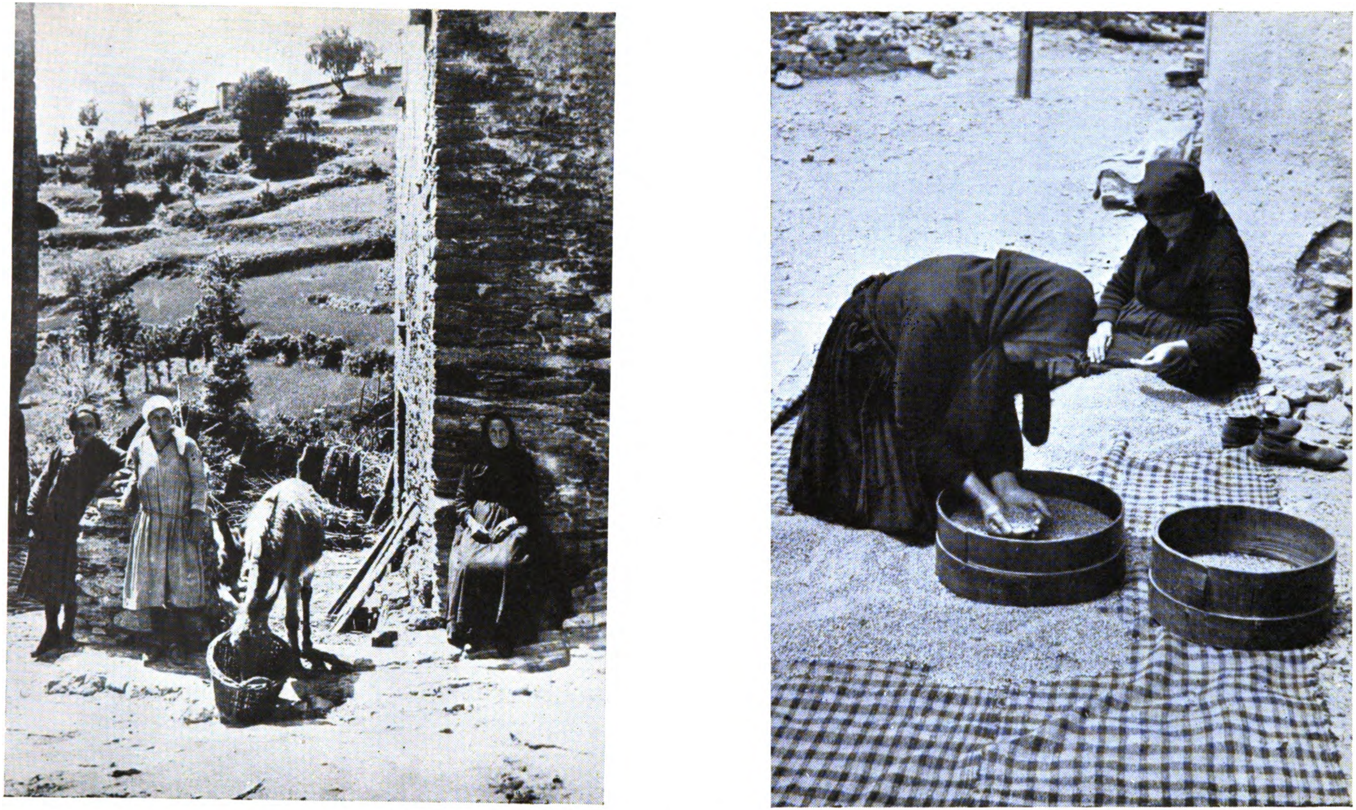
As a rule, generalization about the moral characteristics of a group of people is dangerous, but to many writers, French and foreign, the Corsicans have appeared a proud people, whose chief qualities are honesty, sobriety and generosity. They are polite and hospitable, and their standards of morality are extremely high. They show, however, a certain lack of enterprise and a general indifference to the economic progress and development of the country. The chief social distinction is between the numerous class of officials and the rest of the population. The more ambitious individuals strive to get into any

Plate 53. A street in Ajaccio

The new quarter of the city, with its *places* and tree-lined *boulevards*, contrasts markedly with the old town, huddled within the walls of the *citadelle* (see Plate 79).

Plate 54. Place St Nicolas, Bastia

This *place*, with a frontage along the Avant-port, is paved with varicoloured granite and cheap marble, and is lined with palms and planes. At the far end is one of the many statues of Napoleon in Corsica.



Plates 55, 56. Corsican country women

Plate 55 (left) shows small fields, which have been roughly terraced on the hill-side; olive trees occur here and there.
Plate 56 (right) shows women sieving crushed chestnuts, which in many parts form a basic part of their food.

official post, or to attain officer's rank in the army; this, together with extensive emigration to the mainland, means a great loss of force in the economic life of the island.

BANDITRY AND THE *VENDETTA*

Banditry and the *vendetta* are associated features of primitive justice produced by unauthorized authority and habits of vengeance. They have grown up from early days, when the disordered condition of the island made the attainment of legal justice impossible. A bandit was simply a man who took the law into his own hands and then sought refuge in the *maquis*, surreptitiously fed by his relatives. Until the last thirty years he was in no way comparable to the thieving brigands of Sicily and Sardinia. Immediately after the war of 1914–18 a gangster element was introduced by such men as Romanetti, Caviglioli, Bartoli and Spada. Tribute was exacted on some roads on every sack of charcoal, mail vans were raided or their drivers forced to pay for 'protection', and many murders were committed. In 1931, the French government mobilized the island's garrison, as well as *gendarmes* and troops from the mainland, and even tanks and armoured cars were used. The chief difficulty was the lack of co-operation by the Corsicans themselves, who were unwilling to be involved because of fears for their own safety. Finally, after over 200 arrests had been made, the last bandit, Spada, was guillotined in 1932 at Marseilles.

The terrible feuds or *vendettas* have been one of the curses of Corsica, and have prevented a united front to foreign invaders. Their origin is said to have been during the troublesome times of the fifteenth century (see p. 89), and was the outcome of the lack of legal justice, of a warped sense of honour, of a hot-blooded temperament and of an unforgiving nature. It is significant that the great patriot Paoli (see p. 91) tried to break the *vendetta* to assist his efforts to unify and free the island during the middle of the eighteenth century. The *vendetta transversale*, which involved distant relatives and those by marriage, hired servants and close friends, was carried on with fierce relentlessness. Failure to carry on the blood feud marked an individual as a coward, and a man had to kill a member of the opposite family to guard his honour. It went on until a formal treaty of peace was drawn up between the families, but not before many killings had taken place. Between 1821 and 1852 there were 4,300 murders, that is, an average of 138 per annum. To-day it has ceased to be an active factor in the lives of the people.

LANGUAGE

The language of officialdom and society is French; in Ajaccio and most other towns there are very few who cannot speak French and it is taught in all the schools. In many rural districts a number of people cannot speak French. The majority of the population speak both French and the Corsican dialect.

Corsican is the language of familiarity, but in addition there is a large group of Corsican poets, scholars and writers (*anfarti*) who associate their cultural and literary movements with efforts to maintain the purity of their island speech. Newspapers and reviews appear regularly in Corsican; they include the weekly *A Muvra*, suppressed in 1939, *l'Annu Corsu* and *A Baretta*. Italian political influence is behind many of these cultural movements (see pp. 92–3).

The Corsican dialect is quite unlike French, and is much more like standard Italian than most present-day dialects in Italy. It is in effect an old-fashioned Italian dialect, containing numerous obsolete expressions. Considering the amount of external domination, there are surprisingly few foreign terms in the language, although a number of Arabic and Spanish words occur.

The Corsicans distinguish two main dialectal varieties of their language. They are spoken by the inhabitants who live to the north-east and to the south-west respectively of the mountainous region which stretches across the island from the Golfe de Porto to Solenzaro. The northern variety is known as *Cismontan*, of Tuscan origin. The southern, known as *Oltremontan*, has many affinities with the dialect spoken in northern Sardinia.

There are two minor but interesting local dialects. In the extreme south round Bonifacio an old Genoese dialect is still spoken, introduced in 1195 when the Genoese began their long occupation of that town. At Cargèse, colonized by Greeks in the second half of the eighteenth century (see p. 114), a few individuals still speak a form of Greek.

RELIGION

The Corsicans are for the most part devout Roman Catholics. Their religion enters intimately into their daily lives, and their devotional standards are high.

The majority of the small group of people of Greek descent at Cargèse attend the Uniate Greek Church; it is attached to the *Congregation y Propaganda Fide et Rome*, and the services are said in Greek.

EDUCATION

The educational facilities of Corsica are supplied for the most part by the highly centralized state system of France*; there is also a small number of private schools controlled by the Roman Catholic Church. Primary and secondary education are free and compulsory for all children between 6 and 14. (*Note.* In September 1941, free secondary education was abolished throughout France and a system of scholarships (*Bourses nationales*) was introduced.) Corsica is in the Academy or educational district of Aix, the Rector of which, appointed by the state and directly responsible to the Ministry of National Education, exercises almost complete control over all education except for the small number of Church-controlled private schools. The following tables summarize the educational position of Corsica in December 1937:

Écoles maternelles (*Nursery and Infant Schools*)

No. of schools		Infants on roll of school				Total
		Public		Private		
Public	Private	Boys	Girls	Boys	Girls	
14	1	991	979	30	50	2,050

Écoles primaires élémentaires (*Elementary Schools*)

No. of schools		Pupils on roll of school				Total
		Public		Private		
Public	Private	Boys	Girls	Boys	Girls	
796	14	15,898	14,651	83	899	31,531

Écoles primaires supérieures (*Secondary Schools*)

	No. of schools	Total	General education	Industrial, commercial and agricultural courses	No. of staff
Boys	1	140	99	41	6
Girls	1	318	318	—	11

---

* Details of the French educational system are given in the Handbook on France, vol. II, chap. V.

Écoles normales primaires (*Training Colleges for Elementary School Teachers*)

Male		Female	
No. of pupil-teachers	No. of professors	No. of pupil-teachers	No. of professors
45	2	44	5

Source: *Annuaire Statistique* for 1938, pp. 19–28.

As far as higher education is concerned, there is one *Lycée de garçons* at Bastia. In 1937, there were 1,250 youths at the *Lycée*, studying to take the *Baccalauréat*. This examination is the gateway to the official and professional posts, which are the great ambition of most Corsicans who wish to get away from the tedium of an agricultural life.

Chapter IX

ECONOMIC GEOGRAPHY

Agriculture: Fishing: Industries: Power: Mines and Quarries: Tourist Industry: Conditions under the Vichy Regime

AGRICULTURE

In 1938, the surface of Corsica was utilized as follows:

	Hectares	% of total
Cultivated land	16,373	1·9
Meadows	22,300	2·6
Pasture and rough grazing	230,000	26·4
Woodlands (including plantations and olives)	216,513	24·8
Waste land	350,000	40·1
Not included in the above categories	36,996	4·2
Total	872,182	100

Source: The statistics in this and in the succeeding tables in this section were derived from the *Statistique Agricole Annuelle* for 1938 (Paris, 1939).

From this table it may be seen that the greater part of the country is not suitable for agriculture, due to its mountainous nature and to the thinness of its soil. The main areas of cultivation are on small tracts of level land in the valleys and on laboriously constructed terraces on the hill sides (Plates 48, 55, 59). The largest lowlands along the east coast are, with the exception of a small area round Aléria, unsuitable for agriculture because of the extensive brackish *étangs*, the large amount of ill-drained marsh, and the unhealthy malarial character of the land.

In spite of a summer drought, however, the climate, with its high total of sunshine hours, makes possible the cultivation of a wide variety of temperate, warm temperate and tropical products, and allows an existence to be obtained without undue effort. It is especially favourable for fruits, notably vines, olives and citrus fruits, and for vegetables.

Labour

A large proportion of Corsicans are proprietors of land; very few are tenants, and *métayage* or 'share tenancy' has almost disappeared. There is also a considerable number of paid agricultural labourers, of whom two-thirds were women. In 1938, the numbers of these were as follows:

Permanent			Temporary			
Male	Female	Total	Male	Female	Total	Total
8,365	26,671	35,036	5,698	1,695	7,393	42,429

Some of the permanent and most of the temporary labourers are Italians; the latter come over for the grape and olive harvests (see p. 109). The decrease in foreign labour, together with an absolute decline in rural population in many parts, has created a shortage of labour in the island, which partly accounts for the decrease in the area under crops and the increase of pasture. Many of the Corsicans are shepherds, and like the majority of pastoral peoples feel a repugnance for agricultural labour: In the *Niolo* (see p. 23), for example, the men go off with the flocks for six months, while the women remain in the hamlets and cultivate the fields.

Holdings

The extent of each holding varies considerably; in the uplands they have to be large enough for their owners to derive a sufficient living, while in lowland areas, for example round Ajaccio or in the *Balagne*, cultivation is almost on a garden scale. The cultivable land is divided up to its limit, and there has been little change in the last fifty years in spite of the French inheritance laws, which divide the holding among the children. This is due partly to the decline in rural population over much of the island (see pp. 106–8 and Fig. 39), partly because of emigration to the mainland of France, partly because of the numerous official class who give up or sell their shares to the other inheritors. Land changes hands rarely because its value to the owner, and therefore its price, is high in comparison to its fertility.

The farmer seldom has his holding in a single area adjacent to his home. In many instances the land is several kilometres from the village or hamlet in which he lives. Frequently it is split up, and may include a small patch of arable land in the valley bottom or on the plain, a vineyard and an olive grove on the lower slopes, a small chestnut wood on the upper slopes, and a patch of grazing above the tree-line.

Agricultural Methods

Agricultural methods are generally backward, for the small holdings and hilly country have not allowed much mechanization. In 1938, there were only thirty-nine tractors, forty reapers and fifteen threshing machines in the island. Wooden ploughs are still largely used, as are wooden spades which are very similar to the type introduced by the Moors. In many places grain is threshed by the hoofs of oxen, and a wooden sieve is used to separate the grain from the chaff (Plate 56). There is a great shortage of fertilizers, and as a result the periods of fallow in the rotation systems are exceptionally high. In most parts, potatoes or maize are grown during the first year and cereals during the second and third years, followed by a period of fallow which varies from 4 to 20 years. In more fertile areas, such as small reclaimed parts of the east coast plain, a triennial rotation of maize—wheat—fallow is practised. Thus, except in the gardens near the coast, cultivation is extensive; the farmer does not seek to improve a small area but exploits in rotation a large area. Much of his economy depends on collected products (citrus fruits, grapes, olives, chestnuts, etc.), which are perennial and need relatively little attention except at harvest, and many cultivators have a small flock of sheep or goats on the higher pastures. Only in a few places, notably near Ajaccio and in the *Balagne*, is irrigation practised. The Cap Corse peninsula is more intensively cultivated than any other parts of the island except in the *Balagne* and round Ajaccio. Numbers of men from Cap Corse return from mainland France or South America with some capital and some initiative. The standards of cultivation are therefore higher than elsewhere, and there is an air of prosperity about the villages which is absent in other parts.

Because of scarcity of capital, inefficient methods and general apathy, an island which once supplied large quantities of grain to Imperial Rome is unable to feed itself; tariff-free Algerian wheat is cheaper than that grown in Corsica. Efforts have been made in recent years to remedy this state of affairs. An agricultural bureau for Corsica deals with questions which may arise, and carries on experiments in plant-breeding, etc. A school of agriculture was established at Castelluccio, and a local branch of the *Mutual Crédit Agricole* advances loans for improvement. A detailed survey of the island's agricultural position was made in 1936, which was intended to be a guide to future development. But the major problem remains the uninterested attitude of the Corsican cultivator.

Chief Agricultural Products

The areas of the chief products in 1938 were as follows:

	Area hectares		Area hectares
Olives	30,000	Potatoes	2,300
Cereals	8,200	Other fruits	1,500
Vines	6,650	Fodder crops	1,416
Minor crops and fallow	5,551	Vegetables	1,376

Note. This table does not give a total similar to the one on p. 119. This is because two or more different crops are often taken from the same ground in a single year.

Cereals are of relatively small importance, and have decreased strikingly from 38,000 ha. in 1892 to just over 8,000 ha. in 1938. Among the reasons for the decline are the cheapness of imported wheat, and the increasing amount of arable land which has been turned over to pasture. The areas and production of the four chief cereals in 1938 were as follows:

	Area hectares	Yield 1,000 quintals	Yield per hectare
Wheat	3,900	24·6	6·3
Oats	2,000	18·0	9·0
Barley	1,600	14·4	9·0
Maize	700	15·4	22·0

The average per hectare for wheat is the lowest of any French department; the department of Nord and Aisne had over 20 quintals per hectare, and even the relatively infertile departments of Lozère, Lot and Alpes-Maritimes had over 8 quintals per hectare. The only departments which have a smaller area devoted to wheat are Alpes-Maritimes (which is less than half the size of Corsica), Seine, and the small district of Belfort.

Vegetables. The area and yield of vegetables in 1938 was as follows:

	Area hectares	Production quintals
Asparagus	15	150
Beans	10	150
Cauliflowers	50	6,500
Garlic	4	80
Globe artichokes	410	32,800
Haricots	270	2,970
Melons	60	6,000
Onions	10	450
Peas	62	3,618
Potatoes (new)	300	21,000
Potatoes (others)	2,000	200,000
Tomatoes	170	34,000
Truffles	5	300
Miscellaneous crops (herbs, etc.)	1,600	—

A large part of the Corsican diet is supplied by vegetables, especially potatoes and beans; large supplementary quantities of them have to be imported. The areas of most vegetables have declined since 1892. A notable exception is the globe artichoke, only 2 ha. of which were cultivated in 1892 and 230 ha. in 1929; it has largely taken the place of bread in the plain of Aléria where it is chiefly grown. There is considerable scope for *primeurs*, but owing to lack of organized transport facilities, Corsica cannot compete with the Mediterranean coast of the mainland. Pot-herbs are extensively grown, especially in Cap Corse, for export.

Tobacco was not grown at all in the island in 1938. Yet conditions are admirably suited, and it is estimated that Corsica could supply the whole of French needs. It is so exhausting to the soil, however, that intensive fertilization would be necessary.

Vine. The vine grows very widely, but the standard of cultivation varies and is usually low. In some parts the terraced vineyards are carefully cultivated and surrounded with hedges of heather withes to keep off fierce winds and to provide some shade, as in Cap Corse (Plate 20); in other areas the vineyards are neglected and abandoned to weeds. The area under vineyards has decreased from 17,442 ha. in 1892 to 6,610 ha. in 1938, largely as a result of imports of large amounts of Algerian wine, markedly inferior to but considerably cheaper than the average Corsican *vin ordinaire*. The total quantity of wine produced in 1938 was 197,400 hectolitres. Locally there has been some improvement in quality, although not sufficient to merit extensive export, The best varieties are from Cap Corse, notably *Centuri*, *Canari*, *Farinole*, *Meria*, *Morsiglia* and *Patrimonio*; in the west are the wines of *Calvi*, *Piana*, *Cargèse* and *Cauro*, the last being a red wine of fair quality; in the centre are the wines of *Corte* and *Tallano*, the second of which is probably the best known Corsican variety; in the east is the wine of *Cervione*.

Olives. The olive grows very widely as the granitic soil seems to suit it, and the groves occupied in 1938 some 30,000 ha., approximately 600,000 trees. This total, however, includes large areas of the indigenous wild olive and of derelict abandoned groves which have virtually turned into *maquis*. The *Balagne* area in the north-west is the most important. The pulp is removed from the fruit by grindstones which are revolved by a shaft worked by a horse or donkey, and is then squeezed in a hand-turned press. A high-quality oil results. The industry suffers from several disabilities. The trees are attacked by the olive-fly, which has extended its ravages because of the infested derelict groves for which no one will accept responsibility. In addition, there is a great shortage of labour for picking fruit, and the oil cannot always be sold because of cheaper Italian supplies.

Other Fruits. The climate of Corsica, with its sunshine and relative freedom from disastrous frosts, at any rate near sea level and on slopes with a southern aspect, is well suited for fruit growing. The most important areas are in Cap Corse, in the *Balagne*, and in the lower west coast valleys, especially near Ajaccio.

With a few exceptions, such as the famous orchards of Barbicaja near Ajaccio and those in the *Balagne*, the production of fruit suffers from lack of scientific cultivation like pruning, grafting and spraying (which has encouraged parasitic diseases), from lack of efficient irrigation, and from bad sales organization, such as inefficient grading and faulty packing. The production of the various fruits in 1938 was as follows:

	1,000 quintals		1,000 quintals
Almonds	5·0	Peaches	10·0
Apricots	0·3	Pears	3·0
Cherries	2·0	Plums	1·0
Citrons	8·0	Plums for prunes	2·0
Lemons	1·0	Strawberries	0·1
Tangerines	1·0	Table grapes	1·3
Oranges	6·0	Walnuts	5·0

The citrus fruits, known collectively as *agrumi*, are a relatively recent introduction, and the fine qualities produced could become important articles of export. Citrons (*cédrats*) are grown in the Luri valley in Cap Corse, where they are especially fine, in the *Nebbio* near the Golfe de St Florent, at La Casinca near Vescovato, round the Golfe de Porto and in the Gravone valley. In 1924, there were about 40,000 trees, and the price rose to 800 francs per quintal. They were crystallized in sugar and exported to mainland France, and some even to England and Belgium; others were pickled in brine and sent to the United States. During this boom period the citrons were grown with extreme care; in the Luri valley, individual trees or small groves were sometimes surrounded by rough stone walls and covered with rustic roofs as protection against adverse weather. During the economic slump following 1931 the export of these fruits declined almost to nothing; in 1935, the price sank to 60 francs per quintal, and cultivation was in many places abandoned.

Oranges on the whole are of low quality, as the soil is poor and irrigation is not widely practised. Oranges of high grade are grown at Barbicaja, about 6 km. from Ajaccio, where small tangerines with a fine flavour and thin skins are produced; they are sent to the Paris market.

Temperate fruits, including apples, pears, cherries and plums, are grown in the northern part of the island at heights of from about 550 to 800 m. On southern aspects there is a great variety of more exotic fruits, notably peaches, apricots, almonds and figs.

Chestnuts. The chestnut, which once held a dominant place in the economy of the country and is still important in the north-east (*Chataigneraie* or *Castagniccia*) and in the west coast valleys, has declined considerably. In 1939, there were about 33,000 ha. of trees, which were estimated to produce about 400,000 quintals of nuts. This is approximately a quarter of the annual total before 1914. The decline is due to the 'ink disease' and to the wholesale felling of trees to extract tannin. In many areas they are wild and not owned by individuals; nevertheless, each family has its own nutting grounds. In other districts individuals may own several hundred trees. The nuts are dried in the sun, put in a leather bag and beaten to break the shells. They are sifted to remove the shells, the pieces of kernel are dried in an oven and then ground into flour for human consumption. The national dish is *polenta,* a kind of cake made of chestnut flour, sometimes with maize flour added. Bread is almost invariably made from imported wheaten flour, with a large adulteration of chestnut flour. Animals are fed on the dry peeled nuts.

Mulberries. A small number of these trees are grown, but in 1938 there were only fifty-four silk producers, while the total weight of cocoons was 4,253 kg.

Livestock

The Mediterranean lands as a whole suffer from lack of natural pasture due to the heat and aridity of summer. As a result there is usually a shortage of meat and of animal fats. The mountainous nature of Corsica, however, has resulted in a large amount of rough pasture which occupies considerably more than a quarter of the total area. No other French department has as much natural pasture; the next in order are Lozère with 185,500 ha. and Basses-Pyrénées with 178,200. This type of pasture is most suited to agile close-grazing goats, mountain sheep and mules, and it merges imperceptibly into the *maquis* (see p. 73), which is itself grazed by goats. There is a marked shortage of lowland meadow; it occurs in places on the east coast plain and in the lower west coast valleys, and is used as winter grazing for animals brought down from the high pastures where they spend the summer. The areas of cultivated feeding stuffs are small. The figures for the various categories of grazing in 1937 were as follows:

	Area in hectares
Rough pasture	230,000
Natural meadows and herbage	22,200
Fallow (used in part for winter grazing)	33,000
Lucerne	1,350
Various annual forage crops	66

In 1938, the number of animals in Corsica was as follows:

Sheep	209,900	Asses	15,000
Goats	135,000	Mules	4,700
Pigs	41,700	Horses	4,000
Cattle	36,950		

Transhumance, that is, the seasonal movement of animals to higher pastures in summer and to lower pastures in winter, is generally practised. Many villages have two sections, with winter quarters near the coast and summer quarters near the head of the valley. The flock lives in the open, although in some parts there are folds made of rough branches. In some districts, such as in the *Balagne*, there is no winter descent; sufficient hay is gathered to supply the flocks during the relatively short period when the upland slopes are snow-covered.

Sheep. Corsican sheep are rather small and miserable in appearance, but are well suited to a rough hilly country. In the early nineteenth century, Barbary sheep and merinoes were introduced with a view to improving the yield of Corsican wool, but they failed to flourish. However, in spite of its poor appearance, the native Corsican sheep yields abundant milk of very good quality. Selection has been strictly practised in a few special regions; the prize flocks at Castelluccio produced under ordinary conditions 158 l. per head from February to December 1922. In most areas, however, breeding is more indiscriminate. In 1938, 11,200,000 l. of sheep's milk were produced, of which 9,700,000 l. were used for making cheese and *broccio* (or *brouche*), mostly on a domestic scale. *Broccio* is made by mixing new milk with two or three parts of whey, which is then heated slowly on a fire and skimmed. It is allowed almost to solidify, is placed in a basket of twigs or rushes and there drains and cools. It forms a large part of the food of the shepherd population, and a considerable amount is also sold in the towns.

In 1893, the first Corsican dairy for preparing 'raw' Roquefort cheese was opened at Ile-Rousse. By 1922 there were 158 such commercial dairies, situated at Ajaccio (44), Bastia (31), Calvi (41), Corte (24), and Sartène (18), and both production and value rose considerably, with the result that the shepherds made big profits. There has been some decline in the last 12 years, and in 1938 the number of dairies had decreased to 90. The middlemen in the towns buy milk from the shepherds; the first stage in the production of Roquefort is carried out in the dairies, and the 'raw' cheese is sent to the cellars of the mainland districts for the finishing processes.

Goats. Only the French department of Ardèche (163,000 head) has more goats than Corsica. They are found widely in the mountainous parts of the island, and graze the rougher pastures and the better types of *maquis.* Frequently they are herded with sheep. They are kept primarily for milk, and in 1938, 11 million litres, or very little less than the total amount of sheep's milk, were produced. About 3½ million litres were used for making cheese and *broccio*; the latter is best from goat's milk, especially when the animals have been grazing on aromatic shrubs. Much more goat's milk is drunk '*en nature*' than sheep's milk. The mohair is made into *pelone,* a cloth from which most shepherds' garments are made.

Cattle. Only eight French departments have fewer cattle than Corsica, in spite of its large size. Most are found in the upland valleys of Cap Corse, where there are on an average from 2 to 8 animals per head of the population. Efforts have been made to improve the small local breed by introducing the brown Alpine varieties. The amount of milk produced in 1938 was little more than a third of that from either sheep or goats and almost all was consumed locally by the producers. The total amount (in litres) and the ways in which it was utilized are shown in the following table:

	Non-commercial		Commercial		
Total production	Human consumption	Animal consumption	Butter	Cheese	Cream
4,130	1,300	2,800	10	10	10

Pigs occur widely, as in most of France. Most of them are found in the wooded valleys and on hill-slopes where the animals are turned out into the oak and beech woods.

Beasts of burden. Horses are not numerous; only three other French departments have fewer. There are nearly four times as many asses, and appreciably more mules; these two animals are the chief beasts of burden (Fig. 49, Plate 52). Oxen are also used in some places (Fig. 48).

FISHING

Because of Corsica's central position in the west Mediterranean basin, with an indented coast providing numerous anchorages, it might have been expected that the people would turn to the sea in a similar manner to the Bretons. They have never been, however, a maritime people. The fishing industry is small-scale, scattered around the coast and carried on to a large extent for the subsistence of the fishermen themselves and to a less extent, to supply hotels. Although the returns are given officially under the two main ports of Ajaccio and Bastia, where the fishing boats are registered, there are small fleets at Calvi, Bonifacio, Ile-Rousse, Porto-Vecchio, and Propriano, and also there are one or two boats at almost every sea-coast village (Plates 57, 81). The statistics for 1937 were as follows:

	Fishermen	Owners	Boats	Tonnage	Mechanically propelled		Weight of fresh fish (metric tons)	Total value of products (1,000 fr.)
					No.	Tonnage		
Bastia	558	186	187	258	95	173	304	2,506
Ajaccio	482	193	193	292	158	240	305	4,691

Source: *Annuaire Statistique* for 1938, p. 87 (Paris, 1939).

Thus little more than 1,000 people are employed as boat-fishermen, although probably as many again are part-time shore-fishermen (*à pied*).

A few boats fish away from the island for anchovy, red tunny, mackerel and sole, which are landed chiefly at Ajaccio and Bastia. The most important branch of the fishing industry is the capture of *langoustes* or spiny lobsters by small fleets from Calvi and Bonifacio. They are exported to the mainland. Oysters are dredged near Bonifacio and Aléria. The present amounts are small compared with the vast quantities once supplied for the great feasts of the Roman Empire; the oysters were dredged from the *étangs* near Aléria and

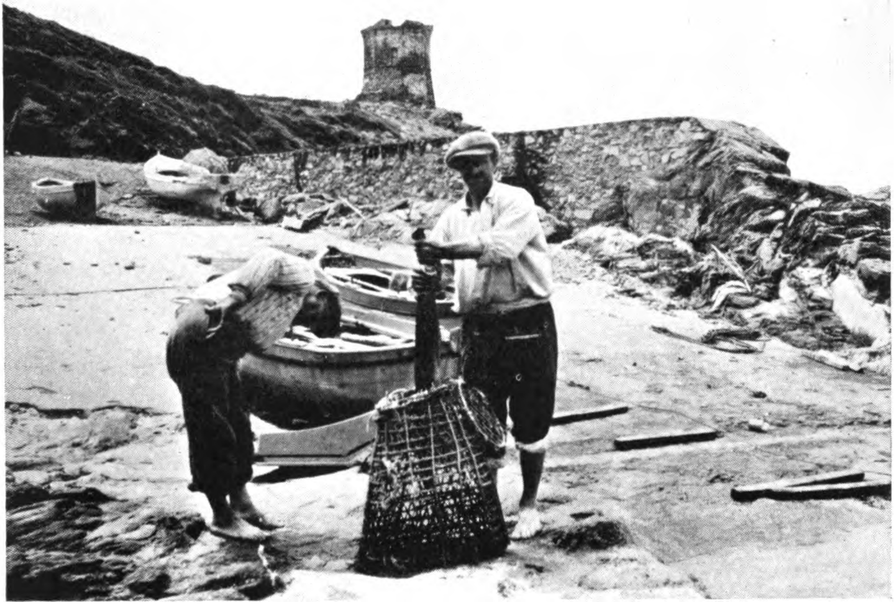


Plate 57. Fishermen at Albo

Many of the bays round the coast of Cap Corse have a small fishing village, sometimes with a landing stage, or with rollers to haul the boats up the beach.

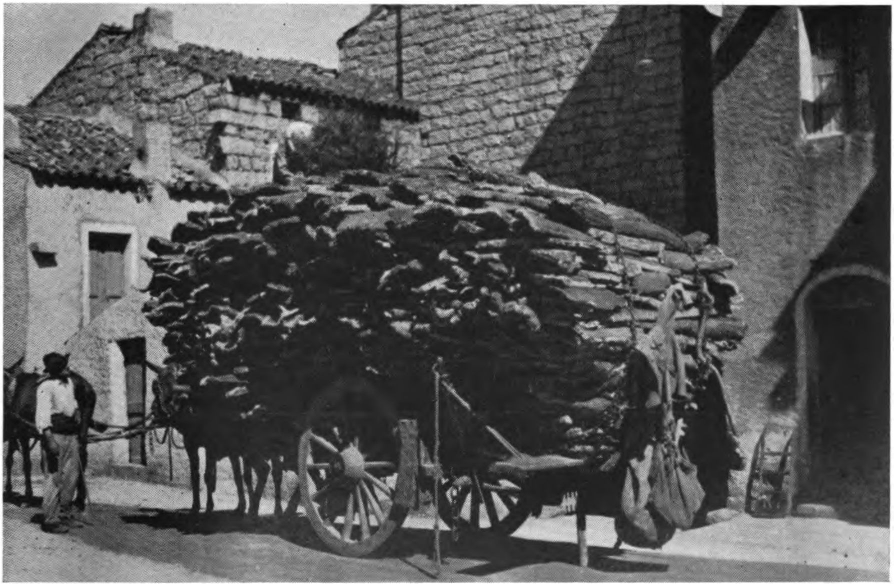


Plate 58. A load of cork at Porto-Vecchio

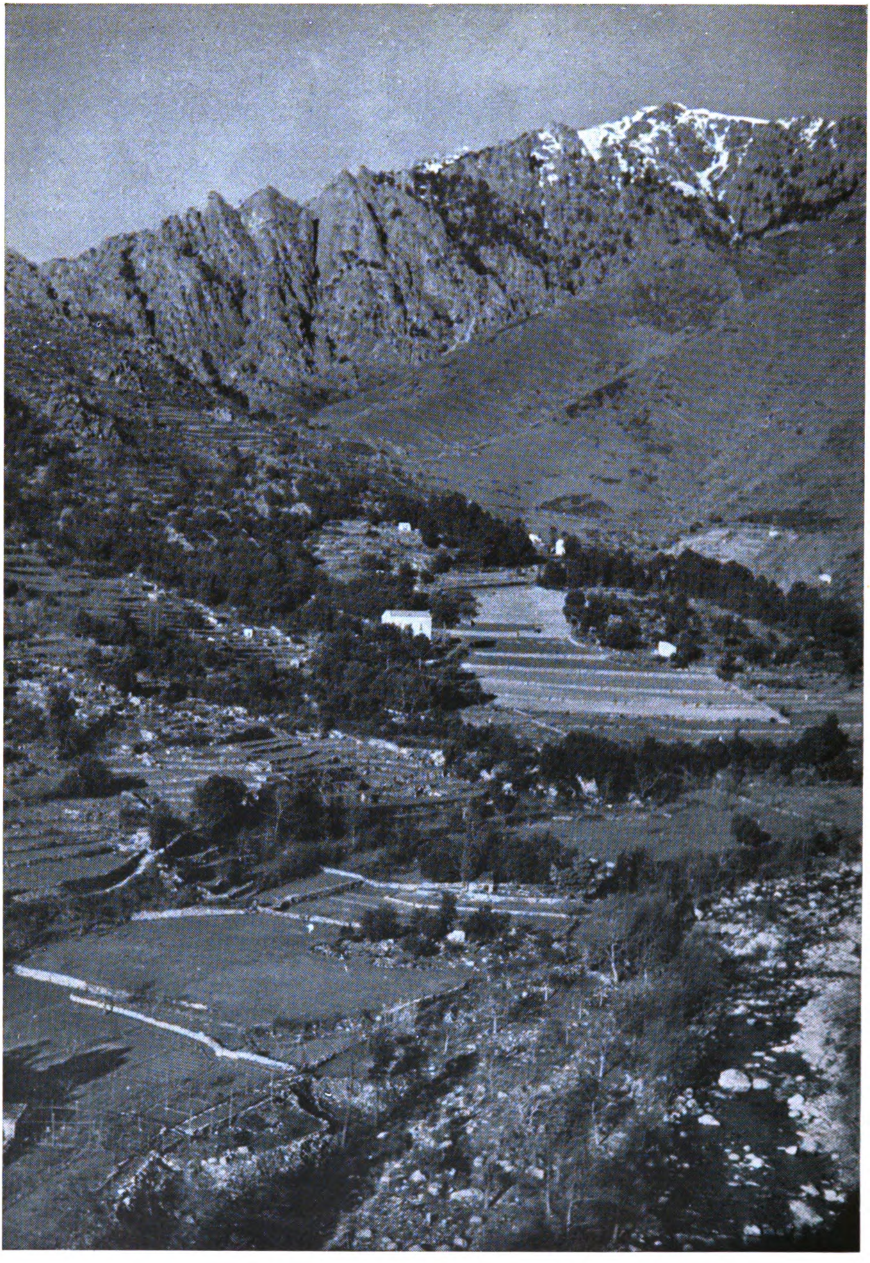


Plate 59. Land utilization near Corte

Level land is rare in Corsica and especially so in the interior; terracing is therefore practised. Between the fields are groves of chestnuts. Above the tree line are grassy slopes grazed by sheep and goats, and higher up still are bare rocky ridges.

from the Étang de Biguglia, as shown by the island in the latter made almost entirely of oyster shells. The *étangs* are now important only for eels, which are sent alive to Naples and Nice for Christmas feasts. Other shellfish include the *clovis*, resembling a cockle, which is caught in the south, and sea-urchins, which are a great local delicacy and are eaten in considerable quantities. Numerous less well-known fish are caught round the south-west coast, notably in the Golfe d'Ajaccio and Golfe de Valinco. These include the transparent *bianchetti*, the *coq de mer*, which is a species of flying fish, and the *mureno*, which is highly esteemed for the delicacy of its rather fatty flesh and is exported to Marseilles. Coral is still collected, but to a much less extent than in the past, chiefly off Capo di Muro south of the Golfe d'Ajaccio. It is much more abundant on the north African coast, but the Corsican variety is finer.

INDUSTRIES

The industries of Corsica are small-scale, and are chiefly dependent on agricultural or forest products. In 1936, there were only fifty establishments classified as factories, and only fifty-two individual pieces of machinery driven by steam. Most of these factories were in Ajaccio and Bastia. These are the lowest figures by far of any French department.

Industries connected with agricultural and fishery products include the manufacture of edible pastes such as macaroni (at Ajaccio, Bastia and Propriano), of cheese (at Ajaccio, Ile-Rousse, etc., see pp. 126–7), of tinned lobster and tunny (at Calvi), of liqueurs (at Ajaccio and Bastia), of olive oil (at Ajaccio, Forciolo, Guargale, Bastia, Ile-Rousse, etc.), of tobacco (imported from the Balkans and packed at Ajaccio), of cigarettes (at Bastia), of cigars (at Ile-Rousse and Propriano), of coral beads, etc. (at Ajaccio), and of preserved citrons (at Ile-Rousse and Bastia). The bottling and export of natural mineral waters is carried on at Orezza, Guagno, Caldane, Ferrière, Puzzichello and Baraci.

Industries connected with forest products include the manufacture of semi-finished pipes, which are hewn from the roots of arborescent heaths, roughed in mills (at Ajaccio, Bastia, Corte, Guiterce, Olivese and Propriano) and sent to the Jura to be completed, of corks (at Ajaccio, Porto-Vecchio and Bonifacio), of tannic acid from chestnut bark (at Ponte-Leccia, Barchetta and Folelli), of baskets and wicker boxes (at Cassano), of paper from chestnut wood (at Barchetta), of turpentine and resin from the pine woods, and of charcoal (generally but especially near Sagone).

The making of charcoal is a widespread industry, carried on by *carbonari* living in forest clearings; most of these men are Italians. A group of charcoal burners usually look after fifteen or twenty fires. High conical pyramids of twigs, branches and logs are covered with turf and mud; holes are left near the ground and a vertical hole left in the middle to serve as a flue. The flues are regulated as the winds vary to maintain slow regular combustion. Fresh wood is added at the top as the pile burns down. After about four days' burning the pile is returfed and left to cool for two days. Work is continuous, as the pyramids are in different stages of combustion. Charcoal is used extensively in the island for household purposes. Cooking is generally done in a primitive brick or stone oven (see p. 112), at any rate in more remote parts, in which charcoal is kept glowing by bellows or even by a fan. Charcoal was also used in the nineteenth century for smelting Elban iron. It is estimated that one-tenth of a hectare of *maquis* 18–20 years old is needed to make 1 ton of charcoal; the industry has been largely responsible for the decrease in the area of forest and *maquis* and its replacement by rough pasture.

Lastly, there is a small cutlery factory at Bastia, a survival from the time when iron ore, obtained locally and from Elba, was smelted with charcoal. A small disused blast furnace is situated north of Bastia. The origin of this cutlery industry is interesting; a Corsican, who had been a slave at Damascus in the sixteenth century and had there learnt the art of manufacturing high-grade steel, returned to Bastia and made axes, knives and needles.

POWER

Gas

Gas-works are situated at Bastia, at Ajaccio, and at Canale di Verde in the canton of Pietra di Verde. The amount of gas distributed is small.

Coal

Coal of poor quality was obtained for a few years from the small basin of Osani near Oporto; the first concession was granted in 1889, and after a number of intermittent years a peak of production was reached in 1909, following which the field ceased production. In 1936, only 6,000 metric tons of coal were consumed in Corsica, mostly in the thermal power stations. Of this coal 5,500 metric tons were foreign and 500 tons French. No coke was consumed in the island. For domestic purposes charcoal is chiefly used, and to a less extent wood from the forests and *maquis*.

Electricity

The supply of electrical power in Corsica in 1937, the last year for which detailed figures are available, was as follows:

Total Installed Electrical Capacity

Thermal generators			Hydro-electrical generators		
Power installed kVA.	Normally available kW.	Energy in 1,000 kWh.	Power installed kVA.	Normally available kW.	Energy in 1,000 kWh.
5,390	4,280	4,409	541	540	3,227

It must be noted that although no figures are available for years subsequent to 1937, both the installed capacity and the energy produced have been increased by the opening of new stations at Sorbollano and at Prunelli.

Source: Statistics and information used in this and in the succeeding tables in this section were derived from the annual publication *Statistique de la Production et de la Distribution d'Énergie Électrique en France* for various years (Paris latest edition refers to 1937).

Only two thermal electric power stations have an installed capacity of over 1,000 kVA.; these are at Bastia (installed capacity 2,640 kVA.) and at Ajaccio (1,200 kVA.), owned and operated by the *Cies. Réunis de Gaz et l'Électricité* and the *Société Corse d'Industries Réunis* respectively. Other thermal stations are at Propriano (700 kVA.) and at Calvi (500 kVA.), while numerous small plant, owned by communes and by individuals, provide local sources of power. The spheres of interest of the chief companies are shown on Fig. 44.

In 1937, there was no hydro-electrical power station with an installed capacity of over 1,000 kVA.; the total hydro-electrical power installed was only 541 kVA., produced chiefly by small generators installed at hotels and worked by mountain streams. In 1937, the two stations at Sorbollano (situated on the Codi, a tributary of the Rizzanèse), with an installed capacity of 1,000 kVA., and at Prunelli di Cassaconi (situated near the river Golo), with an installed capacity of 500 kVA., were completed. They had not been linked to the grid system in 1937, and no information is available as to their subsequent output. The widespread sources of power may be realised from the fact that only twenty-four out of 364 communes are without electricity.

The transmission lines are shown on Fig. 44; their total length was as follows:

	km.
Low tension: direct current over 600 V.	5
Low tension: alternating current	681
High tension	1,265
	1,951

The total amount of energy consumed in 1937 was as follows:

	1,000 kWh.
High tension	309
Low-tension lighting	3,613
Low-tension power	651
	4,573

This compared very unfavourably with the consumption of mainland France; the eighty-nine mainland departments had an average consumption of 130,000 thousand kWh. Only Gers (6,162 thousand kWh.) had a consumption anywhere near as low as that of Corsica. None was used in Corsica for transport or for the electro-chemical and electro-metallurgical industries. The average consumption per head of population was only 14 kWh., of which 11 kWh. were for lighting, compared with respective figures of 391 and 53 kWh. for the whole of France. Even the average consumption per head in Bastia, the largest town, was only 25 kWh. About half of the supply of current was 127/220 V., and half was 230/400 V. Bastia's supply was 110/190 V., Ajaccio's 127/220 V., and Ghisoni's 120 V.

The number of people classified as consumers was 28,768, about 9 % of the total population; this means in effect that between 4,000 and 5,000 houses had electricity.

Projected Schemes. Surveys were made in the late twenties for the complete electrification of the island. One scheme involving a single great hydro-electrical power station at Corte was discussed, but abandoned because of the cost of the high-tension grid and because of the difficulty of the low water supply in summer. Another scheme was envisaged of a series of smaller power stations and reservoirs. Projected schemes resulting from the preliminary surveys of 1928–31 were as follows:

River	Name of station or situation	Contracting company	Maximum head (m.)	Normal available output (kW.)
Liamone	Catena confluence	—	80	1,400
Liamone	Bonapinetta	—	136	1,020
Liamone	Genice	—	140	1,550
Liamone	Zoico confluence	—	52	1,500
Liamone	Truggia	—	140	7,060
Prunelli	Sta Manza	—	358	9,000
Golo	Prunelli di Cassaconi	Cies Réunis de Gaz et d'Électricité	149	1,500
Golo	Cuccia	—	Not known	1,450
Golo	Casamozza	—	28	1,300
Rizzanèse (Codi)	Zoza I	l'Union Électrique Rurale	160	4,200
Rizzanèse (Codi)	Zoza II	M. Casanova	Not known	1,200
Rizzanèse (Codi)	Sorbollano	l'Union Électrique Rurale	Not known	1,500
Rizzanèse (Codi)	Coscione confluence	—	180	4,980
Taravo	Trajetti-Giovanni	—	61	2,350
Fium' Orbo	Inzecca	Électro-Groupement	215	4,140
Restonica	Nogalia	—	233	1,680
Restonica-Tavignano	Corte	—	Not known	1,500
Vecchio	Forticaccio confluence	—	266	2,820

Thus there were eighteen projected stations, with an available output of 48,650 kW. Planned in association were nine reservoirs, with an estimated total capacity of nearly 60 million cu.m. of water, as shown in the following table:

Basin	Reservoir	Maximum height in metres		Volume in million c.m.
		Above the bed of the river	Above the sea	
Prunelli	Ajara	40	700	5·4
Prunelli	Tolla	41	540	6·0
Taravo	Trinité	40	360	10·6
Rizzanèse	St Antoine	50	615	15·0
Fium' Orbo	Sampolo	40	481	3·0
Fium' Orbo	Ghisoni	40	340	1·7
Tavignano	Saraone	40	1,233	8·5
Golo	Albertacce	40·5	840·5	6·1
Restonica	Melo	15	1,745	1·6

One reason why most of these schemes have not been followed up was the lack of capital; this in itself was largely due to the backward economic state of the island, and to the absence of potential industrial undertakings, which were the chief reasons for the electrification of

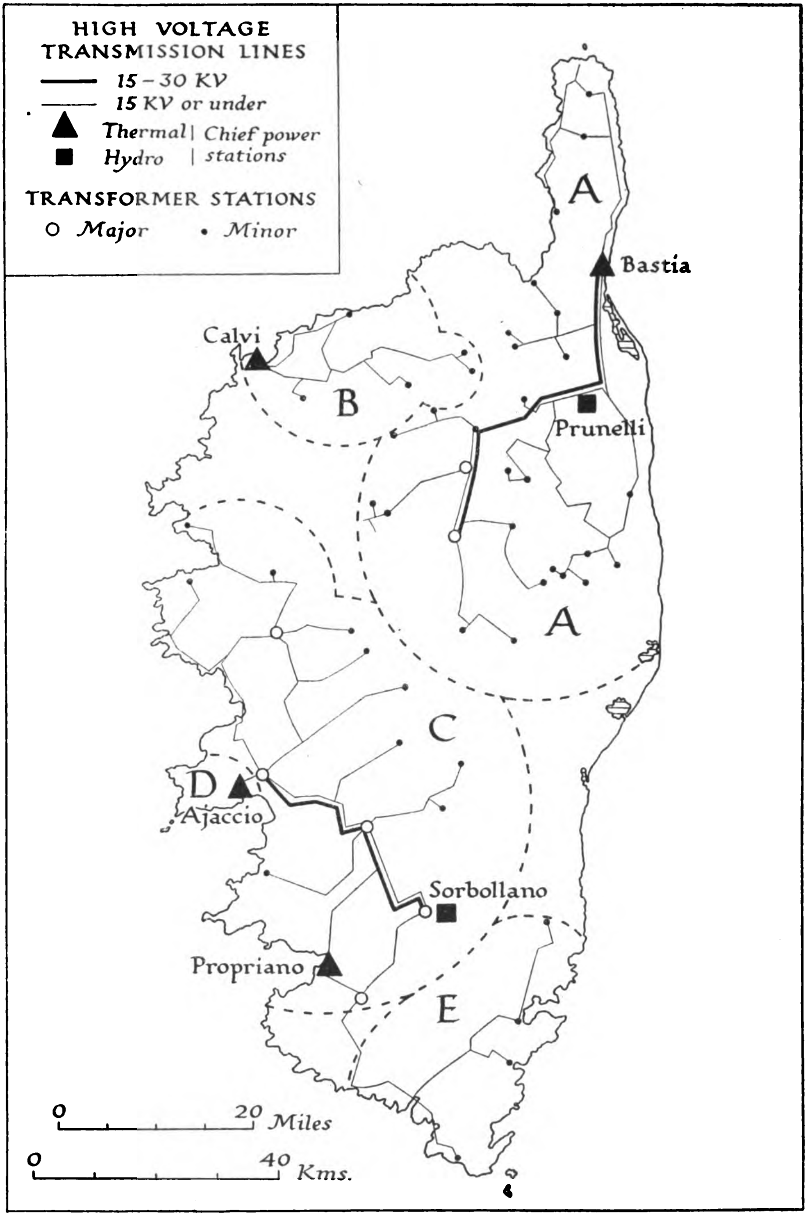


Fig. 44. The grid system

The conceded spheres of interest of the five main electricity companies are delimited approximately by pecked lines, and are lettered as follows: A, *Compagnies Réunis de Gaz et l'Électricité*; B, *Société d'Électricité de la Corse*; C, *l'Union Électrique Rurale*; D, *Société Corse d'Industries Réunis*; E, *Société Méridionale d'Éclairage et de Force*. The Sorbollano and Prunelli stations, although completed, had not been linked to the grid in 1937.

Based on Sheet 4 of the 1:625,000 *Carte de Production, Transport et Distribution de l'Énergie Électrique*, edited and published by the *Société financière électrique* (Paris, 9th edition, 1937).

the French Alps. Another cause is the uncertain regime of the rivers (p. 20); summer drought and winter freezing together produce long periods of low water, and the necessary reservoirs would have been very costly. As a result, by 1936 only two schemes had been put into effect, namely, the Sorbollano station on the Rizzanèse and the Prunelli di Cassaconi, although on a smaller scale than originally planned.

MINES AND QUARRIES

Much of Corsica consists of a crystalline massif; not only do these rocks provide ornamental building stone, but they frequently contain metalliferous veins.

Although numerous concessions to mining syndicates were granted in the latter half of the nineteenth century, mining has been small-scale and sporadic. The causes of this have been the exhaustion of readily accessible veins, the lack of foreign capital, investment of which was discouraged by prohibitive government royalties, and the lack of labour, for the Corsican does not take kindly as a rule to working in mines.

The great variety of minerals obtained from the mines and quarries can be seen from Fig. 45, although this includes some mines which have not been worked for many years. Output has been small and fluctuating, as shown by the following statistics from 1899 to 1936. (*Note.* The figures for metals are given in terms of refined metal; detailed statistics are available only from 1919.)

Year	Coal Metric tons	Other minerals Metric tons	Year	Lead Metric tons	Arsenic Metric tons	Copper Metric tons	Silver kg.	Sulphur Metric tons
1899	15	964	1919	—	600	—	—	—
1900	100	1,547	1922	100	800	—	—	—
1901	98	916	1924	500	1,600	—	—	—
1902	—	914	1925	2,400	1,100	—	—	—
1903	200	295	1926	136	227	3	68	66
1904	—	249	1927	90	500	—	—	—
1905	—	318	1928	—	91	—	—	—
1906	430	1,108	1929	17	30	—	6	—
1907	67	2,341	1930	242	39	—	149	—
1908	—	784	1933–4	—	75	—	—	—
1909	6,741	704	1935	—	35	—	—	15
1910	—	499	1936	—	189	—	—	80
1911	—	2						
1913	—	154						

(*Note.* No mines were in production in 1913–18, 1920–1, 1923, 1931–2 and 1937–8.)

Source: *Annuaire Statistique* (Paris) for the respective years.

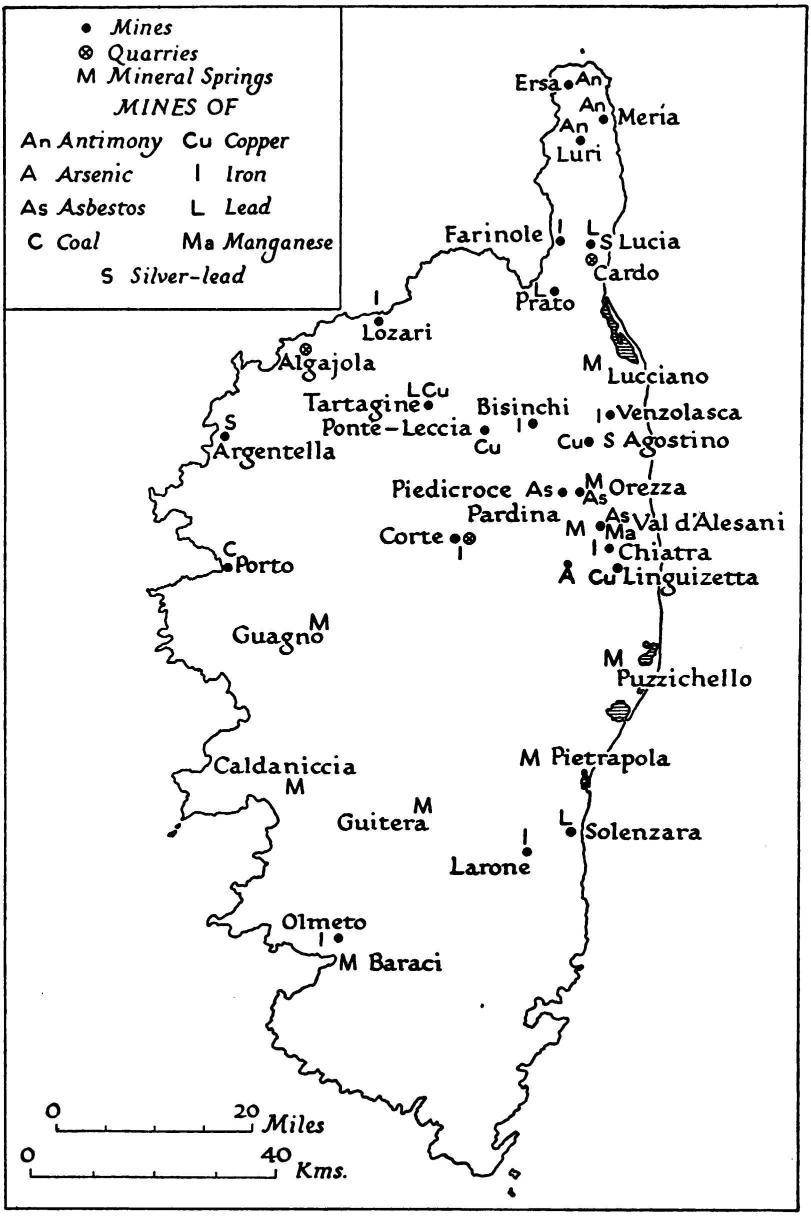


Fig. 45. Mines, quarries and mineral springs

Compiled from miscellaneous sources.

The two most important metals were lead, obtained chiefly from the galena mines at Argentella, Prato and Solenzara, and arsenic, obtained from mines of réalgar (disulphide of arsenic) at Matra near Moïta; the last was leased and worked by the *Société des Mines et Produits Chimiques des Alpes-Maritimes*

Building stones. In 1936, the output of various building materials was as follows:

	Metric tons
Building stone	5,200
Rubble (for ballast, etc.)	64,000
Sand and gravel	32,000
Slate	150
Clay (for bricks)	800
Road metal	170,000

Source: *Annuaire Statistique* (Paris) for 1938.

The last-named category comprises chiefly granite chips, which are used extensively for Corsican roads and are also exported to mainland France. Notable ornamental stones, formerly quarried in considerable amounts, include dark green serpentine near Corte, transparent serpentine at Cardo near Bastia, a fine green marble (*verde antique*) at Bevinco which was used in building the Louvre and the Paris Opera House, zircon-syenite at the Mattoni quarries near Pozzo-di-Borgo and near Gozzi, and rare orbicular diorite (known as *corsite*) at Levie; marbles, granites, and porphyries are quarried in many localities. A notable granite quarry is at Algajola, from which the base of the great column in the Place Vendôme in Paris was excavated. Many churches in Italy and France have used ornamental stone in the past from Corsica, yet in recent years relatively little has been quarried because of the competition of cheaper Italian marbles.

Salt is extracted by evaporation in brine beds along the coast at various places, notably near Porto-Vecchio (Fig. 63). This has increased tremendously in recent years. Until 1934, the annual output was only about 400–700 tons; in 1935, however, 57,880 metric tons were produced, and Corsica became the second producing department in France (Bouches-du-Rhône was easily first with 124,950 metric tons).

Mineral Springs. The main mineral springs are indicated on Fig. 45. The most important are at Orezza (chalybeate and ferruginous, 15° C.), at Puzzichello (sulphurous, 14° C., good for skin diseases), at Guitera (sulphurous, 50° C., especially good for rheumatism and skin diseases), at Guagno (containing sodium sulphate and sodium carbonate, 37–52° C.), and at Pietrapola (containing sodium sulphate, 44–58° C.). Large numbers of visitors are attracted to the hydrotherapic establishments, and there is a considerable export of mineral waters in bottles, as, for example, the famous *Eau d'Orezza*.

TOURIST INDUSTRY

Efforts have been made to exploit the attractive climate with its long hours of sunshine and relative freedom from cold winds, the picturesque mountains, forests and coasts, the mineral springs and spas, and the general 'romantic' atmosphere of this Mediterranean island. As a result, the tourist traffic has attained considerable proportions, especially in the 'season' from March to May. Yet the industry is virtually run from outside the island by the *Cie Fraissinet* and the *S.N.C.F.* The tourist is put ashore from the boat, is taken by post-autobus from one hotel owned or controlled by the two companies to another, completes a circular tour and rejoins the boat. Food from the continent is mainly imported into the large hotels and profits go to the companies and their managers. The tourist traffic, beyond giving employment to a small amount of local labour, and increasing slightly the spending power within the island, does little to help the internal economic situation. Hotel accommodation is inadequate, especially during the 'season'; and schemes to extend the number of hotels were being considered by the *Cie Fraissinet* and the *S.N.C.F.* in 1938 and 1939. Some large cosmopolitan hotels of the luxury type have been built, notably in the two big towns, and at such resorts as Zonza.

CONDITIONS UNDER THE VICHY REGIME

Information about the economic state of Corsica since the capitulation of France is scanty, but it is clear that the island has been thrown almost entirely upon its own limited resources.

In April 1941, Admiral Darlan and M. Balley, the prefect, announced a programme of works, including reclamation and drainage schemes. A policy of 'back to the land' was initiated, and some areas long since abandoned to cultivation have been planted. But there was a great shortage of seeds and implements, and little has been done to put the scheme into effect, depending as they do upon external circumstances.

Plate 60. Olive groves near Ajaccio

Olive groves are widespread on the lower hill slopes; the rough pasture provides grazing in winter and spring, when the upper slopes are snow covered.

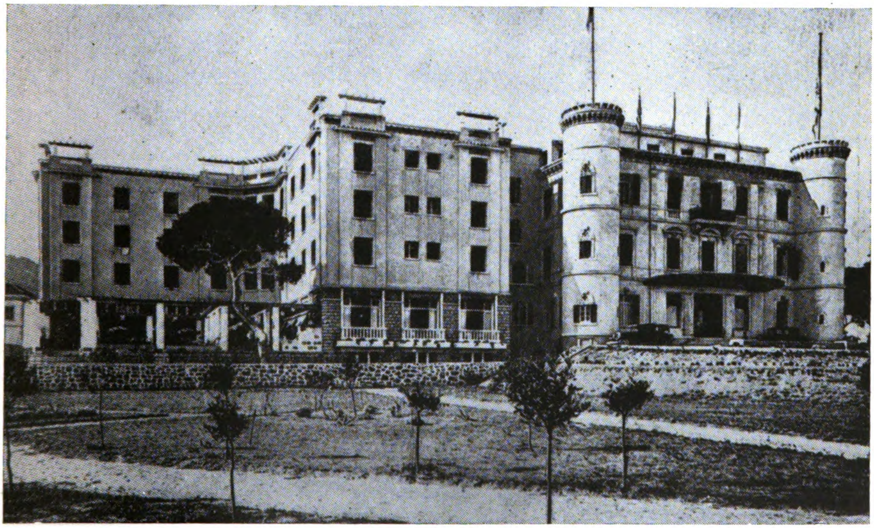


Plate 61. The Hôtel Napoléon Bonaparte at Ile-Rousse

This is the largest of the hotels built in recent years to cater for the expanding tourist traffic. It even possesses an 18-hole golf-course, the only one in the island, situated near the mouth of the river Regino.

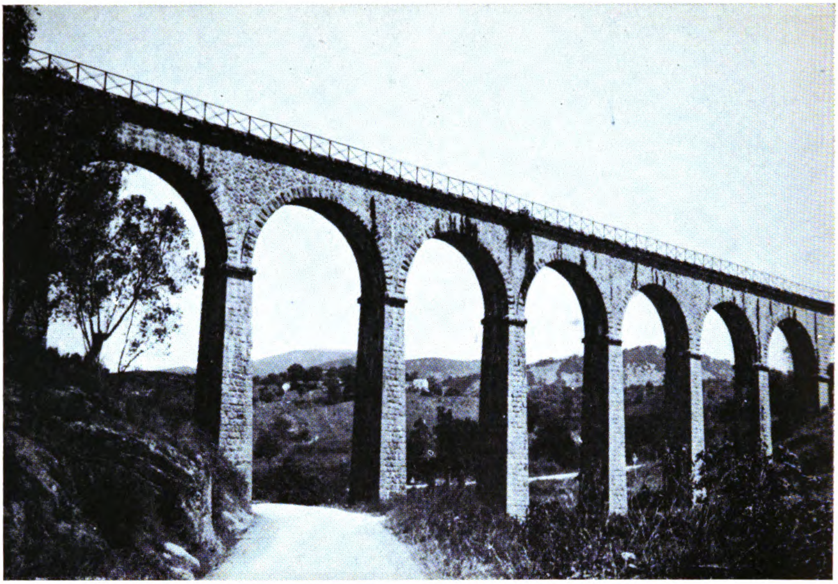


Plate 62. A section of the Ajaccio conduit

Ajaccio's water supply is derived mainly from the river Gravone, across which is a barrage. The water flows in a conduit about 15 km. long, some sections of which are underground.

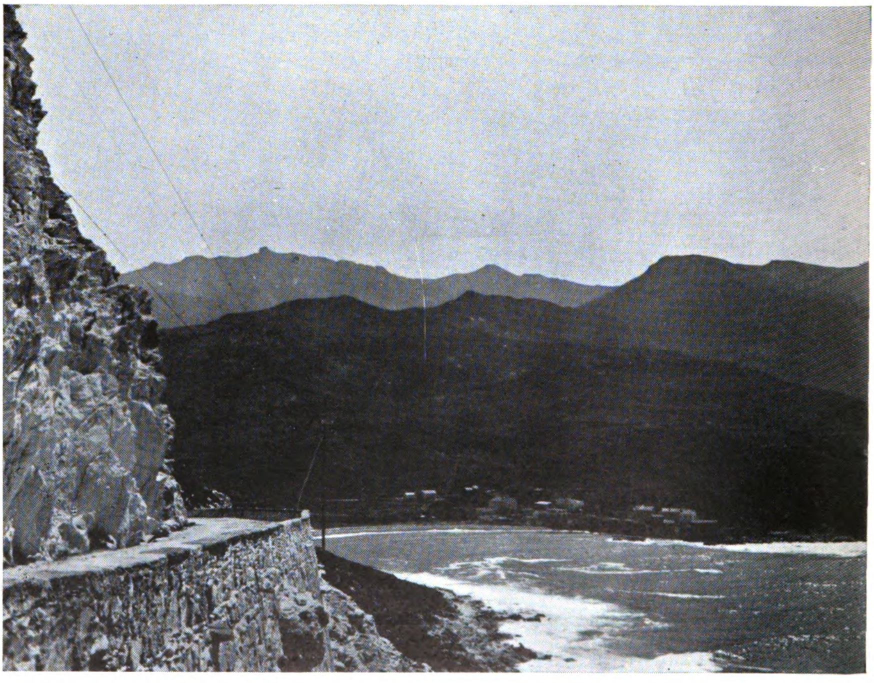


Plate 63. The 'Route de Cap Corse' near Albo

The coast road (N. 198) often has to pass round rocky headlands, and in places it is even hewn out of the cliff face.

Chapter X

COMMUNICATIONS

Maritime Connexions: Air Services: Roads: Railways: Signal Communications: Note on Time

MARITIME CONNEXIONS

Corsica is well served by regular packet-boats. These maintain services for passengers and mails between the island and the French ports of Marseilles, Toulon and Nice, and the Italian ports of Genoa and Leghorn. The distances and approximate duration of these various services are given on Fig. 46.

The *Compagnie de Navigation Fraissinet* of Marseilles has the virtual monopoly of services between the mainland of France and the island. They run services from Marseilles, Toulon and Nice to Ajaccio, Bastia, Calvi and other Corsican ports. The fastest and most luxurious travel is provided weekly from Nice during the holiday months (24 March to 5 October) by the packet boat de luxe *Ile de Beauté*. The shortest services between Corsica and the continent are run from the Italian port of Leghorn by the *Cie Fraissinet* and by the *Navigazione Generale Italiana* (*Compagnie Florio*). The former has sailings from Marseilles via Genoa and Leghorn to Bastia. The latter maintains services between Genoa and Porto-Torres in Sardinia, calling at Leghorn and Bastia en route. During the summer months the *Compagnie Générale Transatlantique* has frequent services from Tunis and Bône to Ajaccio. There is a direct service from Bonifacio to Palau in Sardinia run by the *Service de la Compagnie Sarda*. Other services run by the *Cie Florio* are from Bastia to Porto-Torres, and from Bonifacio to Terranova. Connexions are made at the last of these for Civitavecchia and Rome.

Coastal Services. Daily services of small steamers carrying both passengers and freight are run by the *Services Côtiers* of the *Cie Fraissinet* between St Florent and Bastia round Cap Corse, along the south-east coast from Porto-Vecchio to Bonifacio, from Bonifacio to Propriano, and from Ajaccio to Propriano. There is a bi-monthly service between Calvi and St Florent. The mainland steamers in many cases call at several Corsican ports, thus forming an additional coastal service. One weekly steamer from Marseilles to Ajaccio continues to Propriano, Bonifacio and Porto-Vecchio, a second one to Propriano alone. Similarly, the Toulon steamer calls at Calvi and Ile-Rousse on both inward and outward journeys, and the *Ile de Beauté* calls at Ajaccio, Ile-Rousse and Calvi.

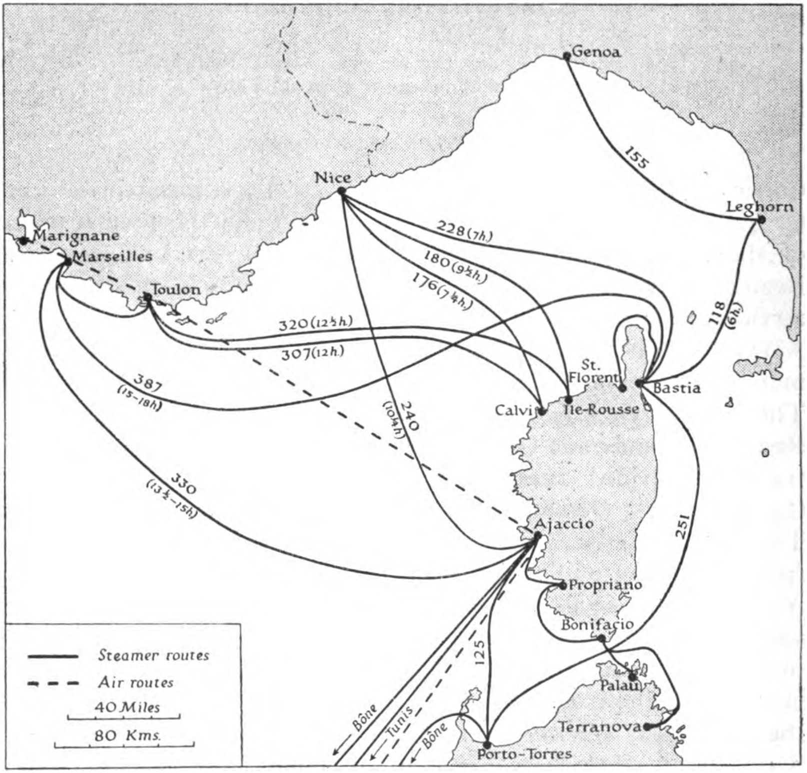


Fig. 46. Maritime and air communications

The actual routes are diagrammatic, the distances (in km.) are average, and the times where given are scheduled fair weather services of packet-boats.

Based on (1) *Guides Bleus Illustrés—La Corse*, p. 50 (Paris, 1935); (2) *Indicateur Chaix* (Paris, 1939).

AIR SERVICES

The Golfe d'Ajaccio is a landing-point on the *Air Union* route from the Étang de Berre seaplane base at the Marignane airport (north-west of Marseilles) to Tunis. There is a daily seaplane service, except on Sundays, in each direction; the journey takes 2 hr. from Marignane to Ajaccio and 2½ hr. on the return.

ROADS

In spite of its predominantly mountainous character, the greater part of Corsica is well served by roads (Fig. 47). The total length of roads n 1938 was 4,028 km., made up as follows:

	km.		km.
Routes nationales	2,017	*Chemins vicinaux ordinaires*	625
Chemins départementaux	1,386		

Source: *Annuaire Statistique*, 1938, p. 118 (Paris, 1939).

There is approximately 1 km. of road for every 2 sq. km. of country, or, expressed in terms of population, 1 km. for every 79 inhabitants. The island has a greater length of *routes nationales* than any other department of France, possessing one-fortieth of the total length in the ninety departments. These are built and maintained by state funds, administered by the *Ministère des Travaux Publics* and controlled by a chief engineer from the *Département des Ponts et Chaussées.*

The *chemins départementaux* are administered by the departmental authorities under the direction of the *Ministère de l'Intérieur*; they are financed by the communes and departments with state assistance for special works. The *chemins vicinaux ordinaires* are maintained by the communes, again helped by state assistance.

There are, in adition, the *routes forestières*, of which there are about 500 km. in the forested uplands; they are roughly surfaced and are used for hauling timber or charcoal (Fig. 48). There are also many hundreds of kilometres of mule tracks (Fig. 49). These last two categories, of course, are not included in the total length of roads, but they are often the sole means of access to outlying upland hamlets.

Telpherways. In many of the forests telpherways have been constructed to carry down timber from the clearings to the lumber camps and saw mills near the roads. They consist of steel cables strung between pylons.

The Nature of the Roads. The surfaces of most *routes nationales* and many of the *chemins départementaux* are remarkably good because of the abundance of granite for metalling. The *chemins vicinaux ordinaires* vary considerably. The *routes forestières* are usually in a bad state, with numerous ruts and pot-holes resulting from the haulage of great balks of timber. Mule tracks vary from rocky paths zigzagging up the sides of precipices to others paved with granite blocks (Fig. 49).

Although gradients are rarely very steep, the mountainous relief causes the roads to be extremely tortuous. The only really straight

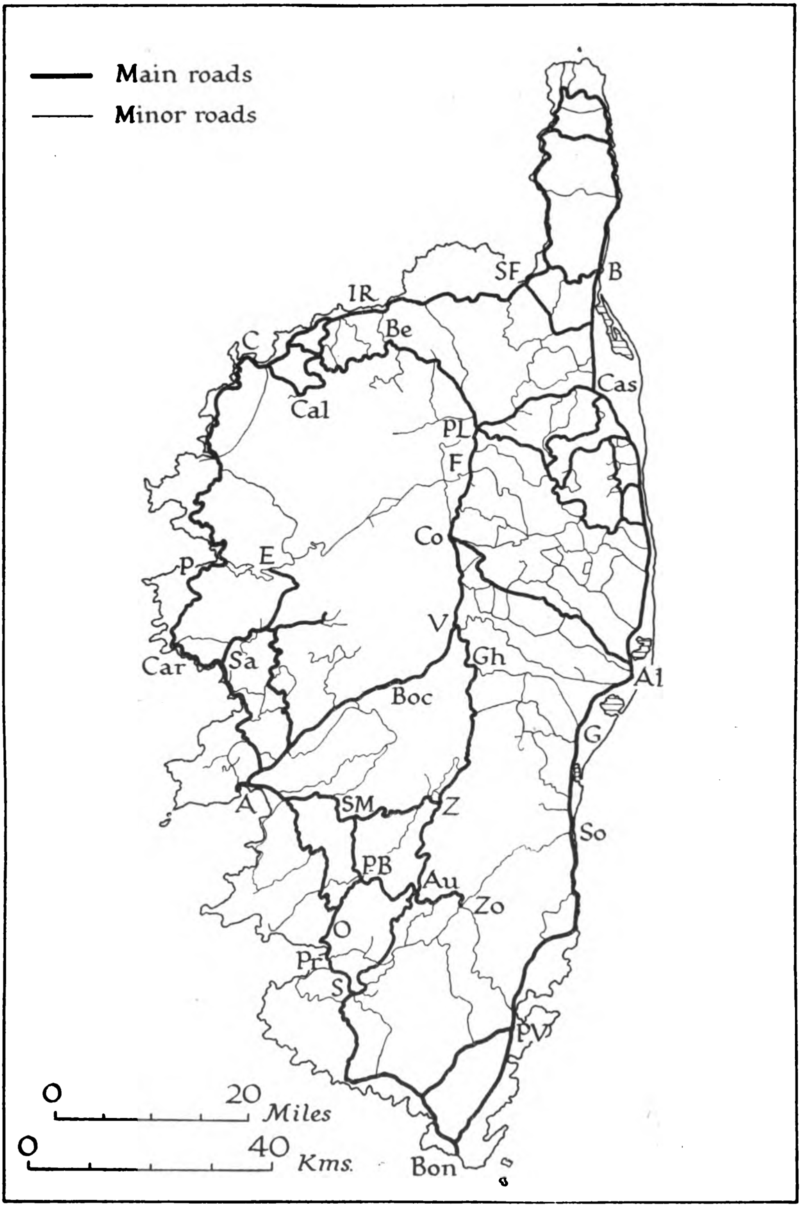


Fig. 47. Roads

Major roads comprise the *routes nationales ordinaires* (Corsica does not possess any of the *priorité* class of arterial highways). Minor roads include the *chemins départementaux* and the *chemins vicinaux ordinaires*, but not the *routes forestières*, which are not shown on this map.

The following abbreviations are used to denote towns and large villages situated on the main routes:

A—Ajaccio; Al—Aléria; Au—Aullène; B—Bastia; Be—Belgodère; Boc—Bocognano; Bon—Bonifacio; Cal—Calenzana; C—Calvi; Car—Cargèse; Cas—Casamozza; Co—Corte; E—Evisa; F—Francardo; G—Ghisonaccia; Gh—Ghisoni; IR—Ile-Rousse; O—Olmeto; PB—Petreto-Bicchisano; PL—Ponte-Leccia; P—Porto; PV—Porto-Vecchio; Pr—Propriano; Sa—Sagone; S—Sartène; SF—St Florent; SM—Sta Maria Siché; So—Solenzara; V—Vivario; Z—Zicavo; Zo—Zonza.

roads are on the east coast plain. The roads from Aullène to Zicavo over the Col de la Vaccia (1,199 m., averaging 1 : 20 for 10 km.), from Morosaglia to Piedicroce over the Col de Prato (974 m., 1 : 20 for 8 km.) and from Ghisoni to Vivario over the Col de Sorba (1305 m., 1 : 16 for 7 km.), to take but three examples among many, are sign-posted *Passage Dangereux*, owing to their sharp zigzags. The maximum gradients on these and on other roads for short distances attain 1 : 6. The *Carte Michelin* says of Corsican roads as a whole: 'Attention, les routes de Corse, à peu d'exceptions près, demandant de la prudence.'

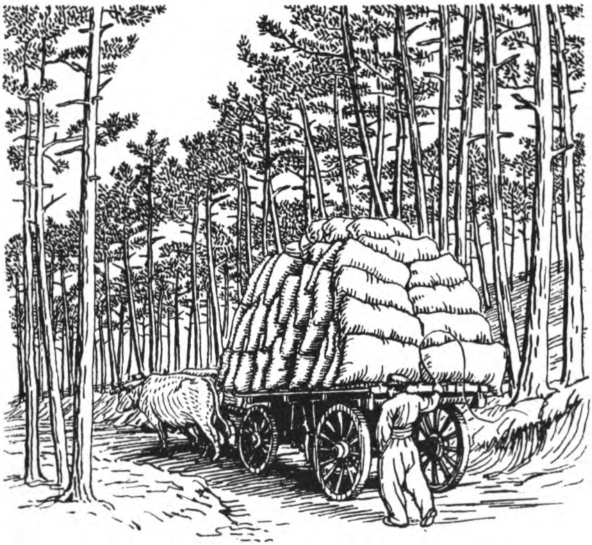


Fig. 48. The transport of charcoal by ox-wagon (drawn from a photograph) Oxen are often used as draught animals in Corsica, particularly for hauling timber or charcoal along the *routes forestières*.

As in the case of the railways, engineering difficulties are often great. The usual approach to most of the cols in the interior is along a valley, but frequently this becomes a gorge edged by cliffs, while the valley bottom has room only for a stream cascading over boulders (Fig. 49). Thus many of the mountain roads are blasted out of the sides of rocky slopes and may ascend in steep zigzags, or pass through tunnels cut in the solid rock. While most of the *routes nationales* attain a width of 4–5 m., thus allowing the post-autos to pass, the effective width is reduced on the tortuous roads by the sharp curves (Plates 64–5). The large number of streams and torrents have necessitated a considerable amount of bridge-building

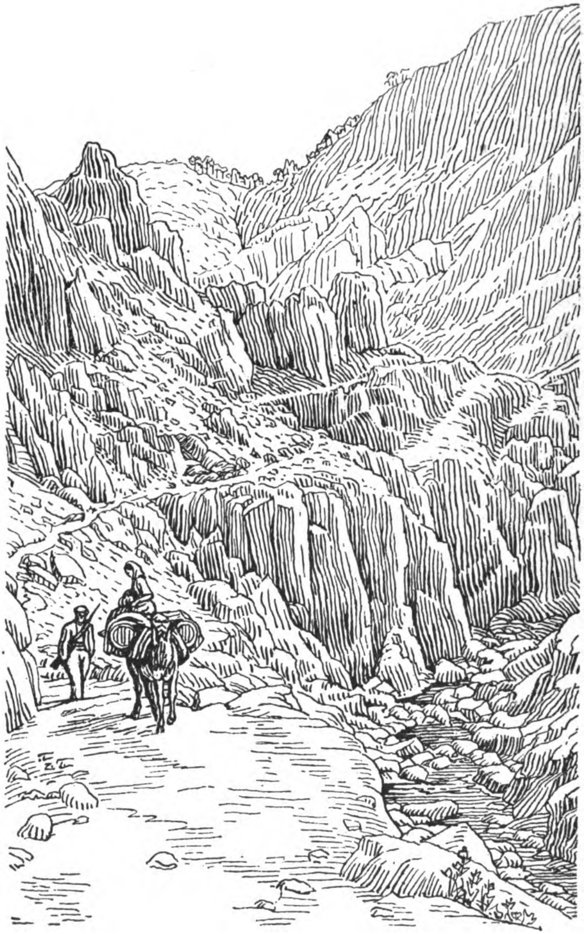


Fig. 49. A mule-track in the Tavignano gorge (drawn from a photograph)

Mules are used extensively as beasts of burden in the more mountainous parts of the island. Rough mule-tracks are frequently the only means of access to isolated hamlets, to the summer dwellings of shepherds, or to well-known places of tourist interest; an example of the last is the Tavignano gorge.

(Fig. 53, Plates 67–8). While a road usually follows a main valley, natural difficulties often force it to run first on one, then on the other side of the river, while it is constantly obliged to cross minor torrents flowing down the hill-side to the main river.

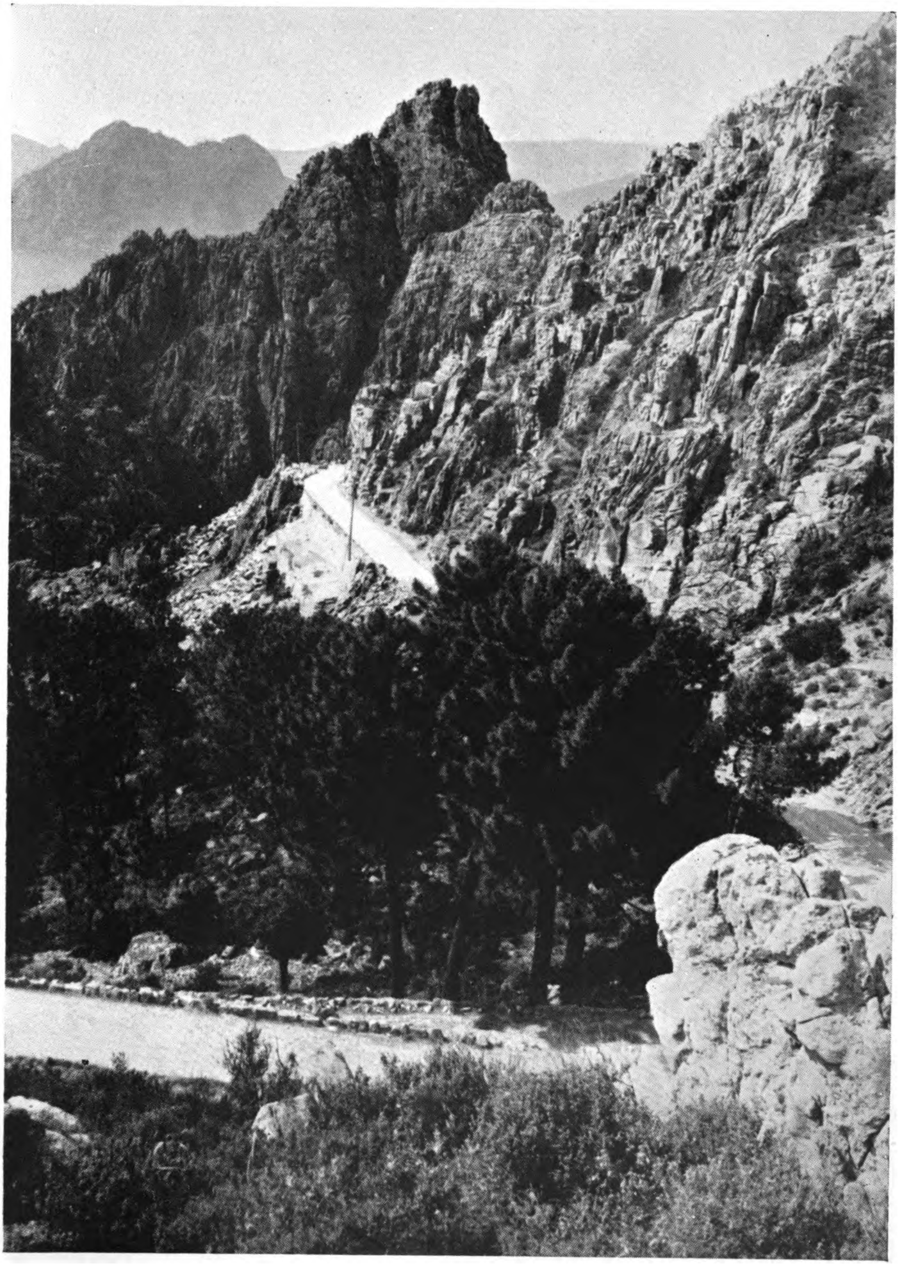


Plate 64. The coast road near Piana

The west coast road (N. 199) zigzags along the southern shores of the Golfe de Porto, through the granite masses of the Calanques de Piana.

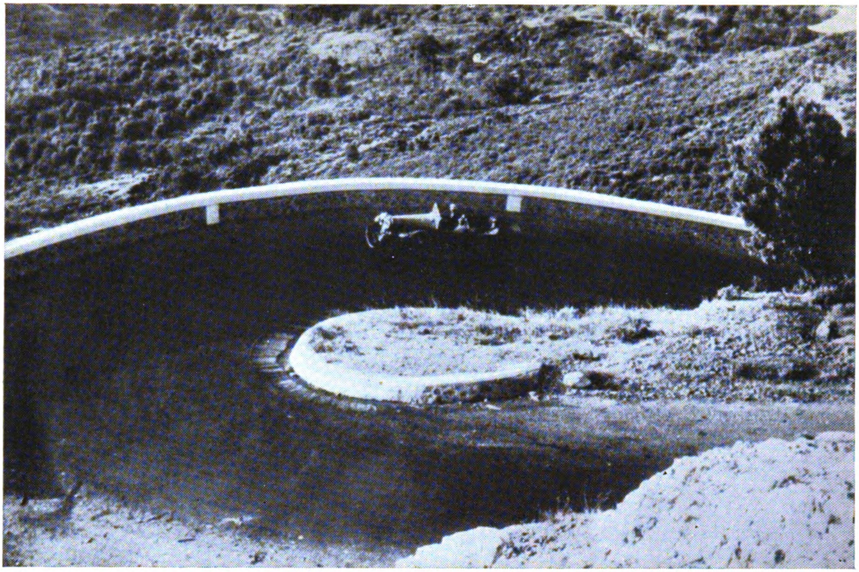


Plate 65. Col de Teghime

One of the very acute bends on the road between Bastia and St Florent (N. 194), which crosses the 'neck' of Cap Corse by the Col de Teghime (541 m.).

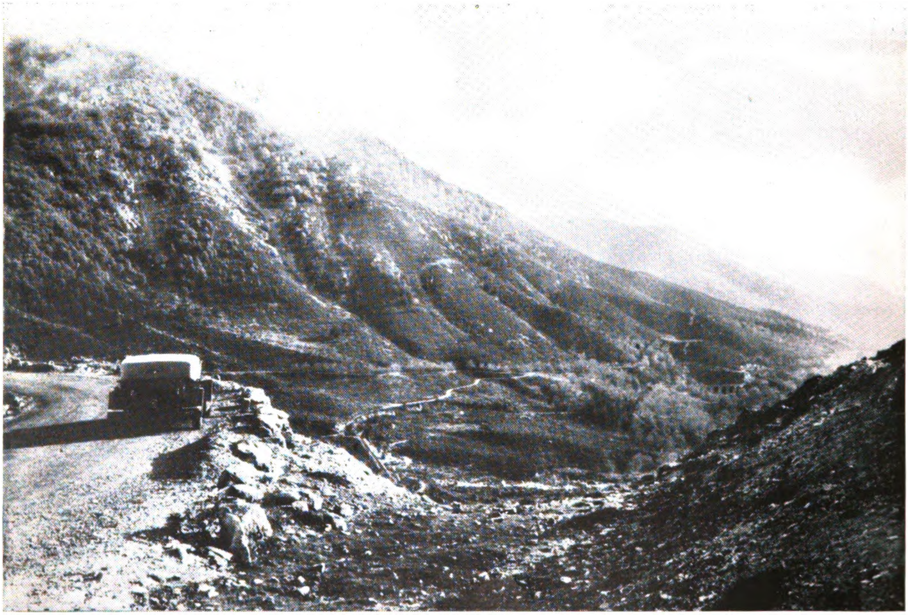


Plate 66. Col de Vizzavone (looking south-west towards Ajaccio)

This pass forms the highest point (1,162 m.) of the road (N. 193) across the island between Ajaccio and Bastia. The railway emerges from a tunnel below the pass. To prevent interruption by bad weather, telephone wires across the pass are laid underground for a distance of 8 km.

There are no roads continuously blocked by snow for several months. Several passes are intermittently blocked for varying lengths of time between November and April, or may be temporarily signposted *Passage Dangereux*, due to the possibility of avalanches from the upper slopes. These include the Col de Vergio (1464 m.), the Col de Vizzavone (1162 m.) (Plate 63), and the Foca di Verde (1345 m.).

The Post-auto Service. An efficient system of omnibuses is provided by the *Services Autocars de la S.N.C.F.*, formerly the *P.L.M.* Fig. 50 shows the routes covered by daily services throughout the year, and also those which are covered from March to September only. They carry passengers and mails. During the holiday season there are circular tours of varying length from each big centre.

Geographical Description

The main roads of Corsica may be most conveniently grouped as seven routes, which link up the important towns and villages. These routes may be followed on Fig. 47, on the folding map at the back of this volume, and in detail in the Itineraries (Appendix VI, pp. 203–7).

I. *Ajaccio to Bonifacio*, via Cauro and Sartène (*Route Nationale* 196)—139·0 km. (86·3 miles).

The road runs south-eastwards from Ajaccio to Bonifacio, at right angles to the general direction of the ridges and valleys. It therefore has to cross several cols between successive valleys, and is exceedingly tortuous; the distance between Ajaccio and Bonifacio as the crow flies is 70 km., or half the actual road distance.

From the Golfe d'Ajaccio the road runs inland to Cauro, then over the Col de San Giorgio (762 m.) to the Taravo valley, which it reaches some 15 km. from the sea. It crosses the Col de Celaccia (594 m.), descends through Olmeto, and reaches the coast once more at Propriano near the head of the Golfe de Valinco. It continues up the Rizzanèse valley, winds through the hills to Sartène, and drops down to the Ortolo valley. For the rest of the distance the road parallels the south-east coast, keeping some distance inland to avoid the long inlets of the Golfes de Figari and de Ventilegne, and then crosses the Col d'Orbia to Bonifacio.

II. *Ajaccio to Bastia*, via Vizzavone, Ponte-Leccia and Casamozza (*Route Nationale* 193)—155·0 km. (96·3 miles).

This road forms the main route across the island between the two chief cities. For a great part of its distance the road has to follow narrow steep-sided valleys, ascending in steep zigzags, and crossing and recrossing the numerous rivers. It also has to cross numerous passes, the highest of which is the Col de Vizzavone (1162 m.) (Plate 66). The route in general is described as follows: 'Nombreuses montées et descentes rapides, avec tournants souvent dangereux.'

From Ajaccio it runs north-east up the Gravone valley, following at first the northern, then the southern bank of the river. After crossing the steep Col de Vizzavone, maintaining an average gradient of 1 in 10 for the last 4 km., it descends to the upper Tavignano valley, and continues north over the numerous cols of the 'Central Furrow' to Corte and Ponte-Leccia. It then runs east along the steep-sided valley of the river Golo to the coast plain at Casamozza, from which place it follows the edge of the uplands, that flank the *étangs* and marshy plain, to Bastia.

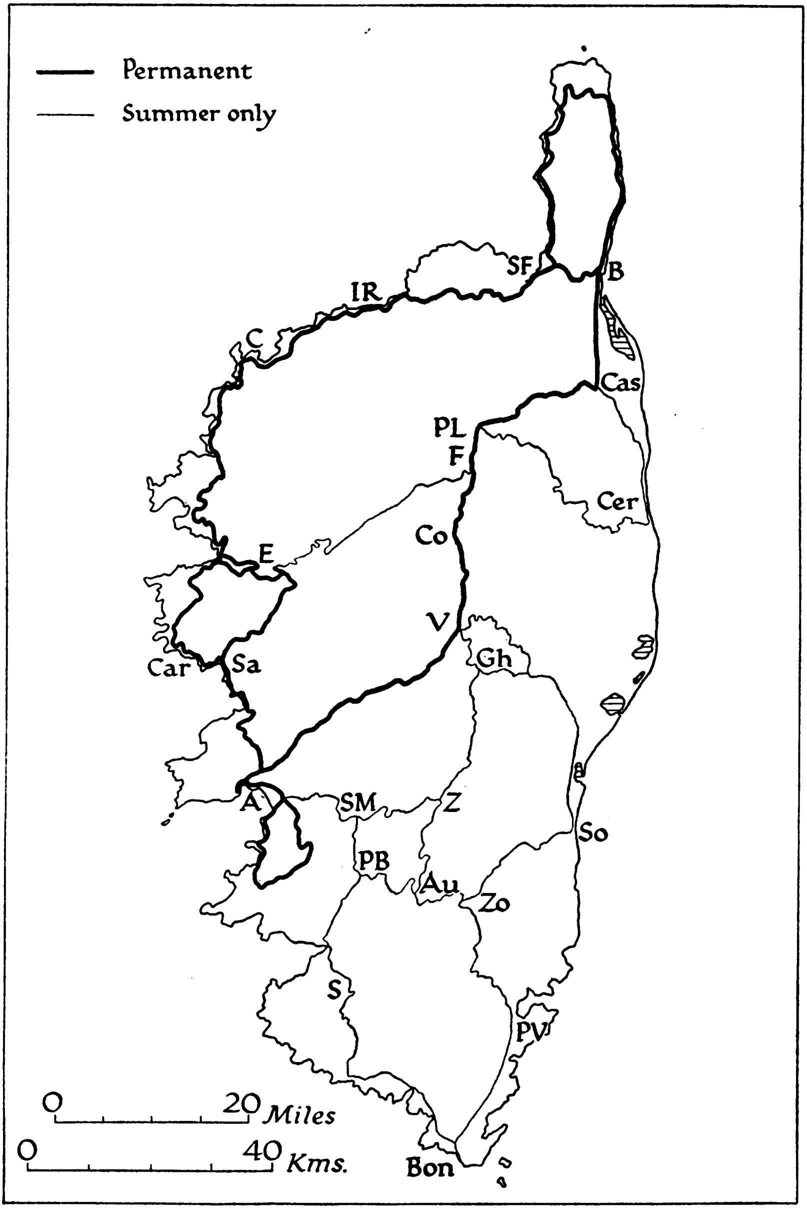


Fig. 50. Post-auto routes, 1939

The scheduled routes operated by the *Société Nationale des Chemins de Fer* (*S.N.C.F.*) during 1939 are indicated.

The following abbreviations are used to denote the chief autocar halts: A—Ajaccio; Au—Aullène; B—Bastia; Bon—Bonifacio; C—Calvi; Car—Cargèse; Cas—Casamozza; Cer—Cervione; Co—Corte; E—Evisa; F—Francardo; Gh—Ghisoni; IR—Ile-Rousse; PB—Petreto-Bicchisano; PL—Ponte-Leccia; PV—Porto-Vecchio; Sa—Sagone; S—Sartène; SF—St Florent; SM—Sta Maria Siché; So—Solenzara; V—Vivario; Z—Zicavo; Zo—Zonza.

III. *Ajaccio to Bastia*, via Calvi and St Florent (*Routes Nationales* 193 to Mezzavia, 199 to Calvi, 197 to Lumio, 199 to St Florent, and 194 to Bastia)—259·5 km. (161·2 miles).

The road parallels the west and north coasts, at distances varying from a few metres to more than 10 km. from the sea. It links the heads of the gulfs; but cuts across the ridges which terminate as rocky headlands. As a result, the road is extremely tortuous, and climbs steeply in places.

From Ajaccio the road runs in a northerly direction over the Col de St Bastiano (415 m.) to the Golfe de Sagone, the head and northern shore of which it skirts to Cargèse. It continues over two prominent cols to Piana, and zigzags through the region of the Calanques (see p. 11, Plate 64) and round the shores of the Golfe de Porto. The route strikes inland over the Col de Parmarella (374 m.) to the Golfe de Galéria, then follows the coast closely to Calvi and Ile-Rousse. From the last place it winds eastwards through the rugged country south of the Agriates massif to St Florent, and crosses the 'neck' of Cap Corse by the Col de Teghime to Bastia.

IV. *Bastia to Bonifacio*, via Casamozza and Porto-Vecchio (*Routes Nationales* 193 to Casamozza, then 198)—174·0 km. (108·1 miles).

For the greater part of its length the east coast road is relatively straight, and keeps close to the shore, except where it is forced inland by *étangs* or by unpopulated marshy land. The chief difficulties were the numerous bridges needed to cross the torrents flowing to the sea.

From Bastia to Casamozza (see Route II) the road runs along the edge of the uplands, and at the latter place is some 8 km. from the shore. Where the uplands of the *Chataigneraie* approach closely to the coast (between the mouths of the rivers Golo and Bravone), the road parallels the shore at a distance of a few metres, but south of Aléria it swings inland again to avoid the large Étang d'Urbino. At Solenzara it reaches the coast and once more follows it closely to Ste Lucie, where it makes a large detour inland round the Golfes de Pinarello and de Porto-Vecchio. It continues in an undulating manner through the low hills of the south-east to Bonifacio.

V. *Bonifacio to Calvi*, via Sartène, Vivario, Ponte-Leccia, and Belgodère (*Routes Nationales* 196 to Sartène, 194 to Vivario, 193 to Ponte-Leccia, and 197 to Calvi)—296·0 km. (183·9 miles).

The road forms in effect a north-south route through the centre of the island; the sections from Bonifacio to Sartène (Route I), and Vivario to Ponte-Leccia (Route II) have been described.

From Sartène the road strikes inland up the Rizzanèse and then the Coscione valleys, and crosses the Col de la Vaccia (1199 m.) to the upper Taravo valley. It climbs over the Foca di Verde (1345 m.), descending on the north side at an average gradient of 1 in 14 to Ghisoni, and thereupon climbs over the Col de la Sorba (1314 m.). It drops steeply (averaging 1 in 10) to Vivario, where it joins Route II.

From Ponte-Leccia the road continues up the Navaccia valley, and follows an exceedingly tortuous and undulating route through the hills of the *Balagne* to join the coast road (Route III) near Calvi.

VI. *Corte to Aléria*, via the Tavignano valley (*Route Nationale* 200)—50·5 km. (31·3 miles).

The road follows closely the river Tavignano, and forms the easiest and most direct route between the 'Central Furrow' and the east coast. The descent from Corte is gentle, although the first 35 km. follow the windings of the river and are rather tortuous.

VII. *Bastia to St Florent*, via Cap Corse (*Route Nationale* 198)—122·7 km. (76·2 miles).

The 'Route de Cap Corse' follows the coast very closely from Bastia northward to Macinaggio, winding and undulating gently round the incipient headlands and bays. It then turns inland and zigzags across the mountain 'backbone' of Cap Corse by the Cols de St Nicolas and de la Serra to the west coast, and continues south through Pino, Albo (Plate 63) and Nonza to the Col de San Bernadino, where it joins Route III about 12 km. from St Florent. The road is in many places cut out of the sides of the cliffs in which the promontories terminate.

Thus in effect there is a main road which follows more or less the coast of the whole island, another which runs from north to south through the mountainous interior, and a small number of west-east cross routes, which utilize the river valleys and the passes at their heads.

Numerous *chemins départementaux* and *chemins vicinaux* of varying degrees of quality connect the main inhabited areas. One network links up numerous scattered communes in the *Chataigneraie*, another in the south-west serves the upland settlements between the Liamone, Gravone and Taravo valleys. Routes run from the coast road up most valleys to the scattered habitations at their heads, but only rarely do they cross the watershed. To get from the head of one valley to its neighbour it is necessary to travel down to the coast and up the next one.

The areas whose sole lines of communication are mule tracks, goat tracks or *routes forestières*, stand out clearly on Fig. 47. Across the centre of the island, from north-west to south-east, is a rugged mountainous zone crossed only by two main and two minor routes. The other areas of low density are the projecting west coast peninsulas and the massif of Agriates north of the road from Ile-Rousse to St Florent.

To pass across the island from east to west is difficult. The roads have to climb up the valleys and cross the main watershed of the island by cols well over 1,000 m. high (see table, p. 202). The paucity of these cross-roads is shown on Fig. 47.

RAILWAYS

Corsica possesses 363 km. of railways, and another 30 km. were under construction in 1939. This total represents 1 km. of railway for every 24·0 sq. km. of territory, or 1 km. of railway to 944 inhabitants. The whole system is metre gauge and single-track (Plate 70), classified as *intérêt local*, in contrast to the standard gauge, *intérêt général*, of the greater part of the French mainland network. There are thirty-eight stations and nineteen halts where trains stop on request; this

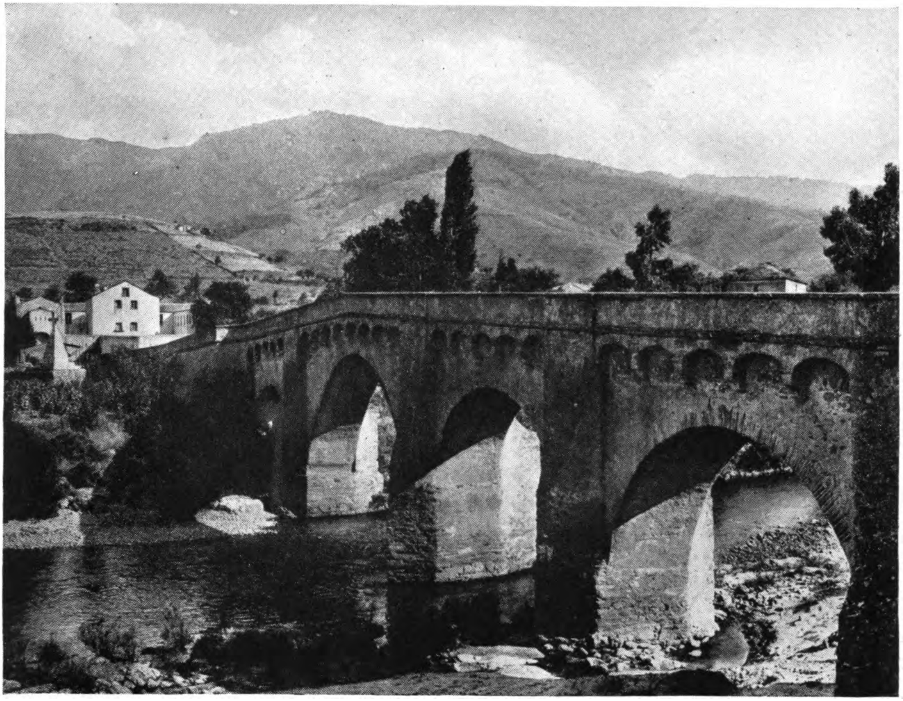


Plate 67. The Golo bridge at Ponte-Nuovo

The old Genoese bridge across the river Golo between Ponte-Leccia and Casamozza on N. 193. Near the farther (right bank) end of the bridge can be seen a monument to commemorate the last battle for Corsican independence against the French in 1769.

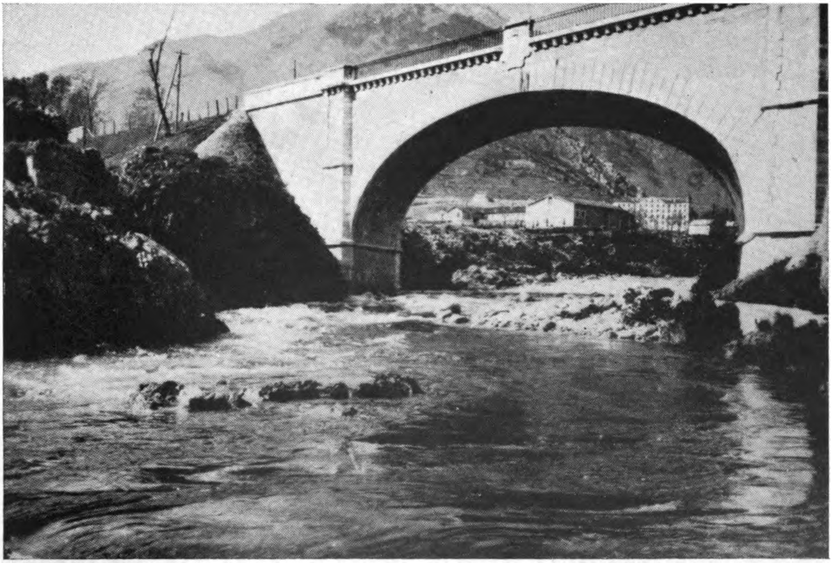
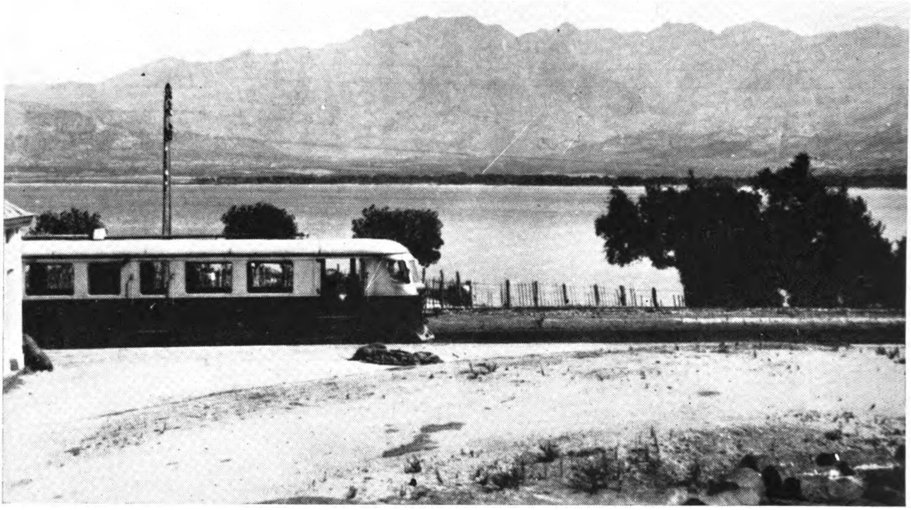
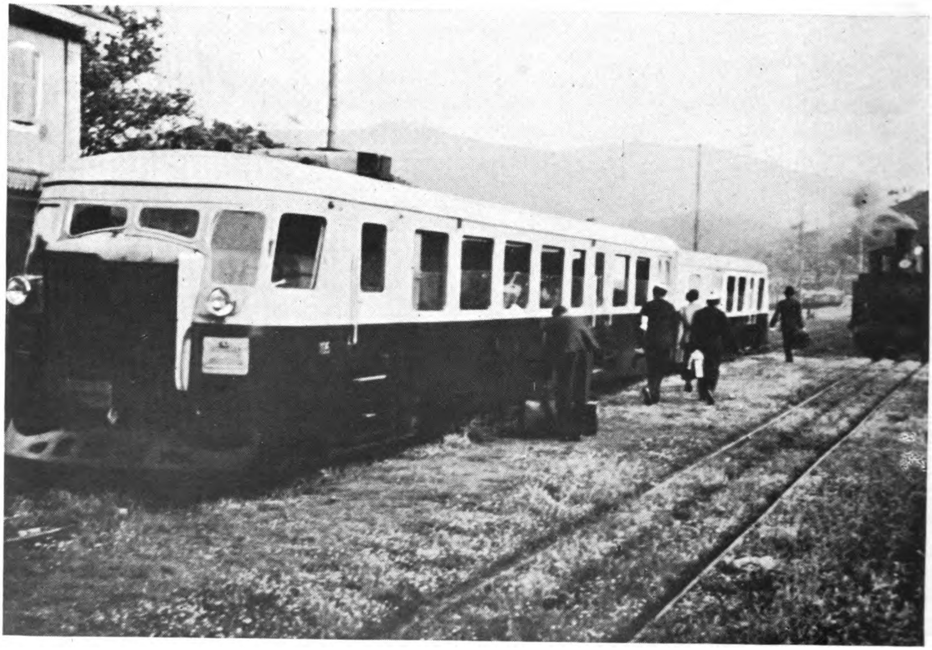


Plate 68. The Tavignano bridge at Corte

This bridge carries the road and railway across the Tavignano to Corte station on the south bank of the river.





Plates 69, 70. Railcars at Calvi and Corte

Ten railcars were in use in Corsica in 1939; they provide the speediest and most economical form of rail transport in the island. Plate 69 shows the terminus at Calvi, Plate 70 the station at Corte. Although the Corsican system is single-track, most of the stations have passing loops.

gives an average of 6·4 km. between all stopping points, while the maximum distance between them is 14 km.

Historical Background

There were two chief difficulties which delayed the construction of Corsican railways until the last two decades of the nineteenth century. The first was the mountainous nature of the country, which necessitated much elaborate engineering and made the cost per kilometre exceptionally high. Bridges, viaducts and tunnels are numerous (Figs. 52, 53, 54, Plate 66). The second was the relative sparsity of population, together with the retarded economic development of the island, which provided little financial inducement for private companies.

The Corsican railway system was built by the *Compagnie des Chemins de Fer Départementaux* of Paris, which was responsible for local lines in several parts of France. In 1888, some sections of line were opened, namely, Bastia–Casamozza, Casamozza–Ponte-Leccia, Casamozza–Ghisonaccia and Ponte-Leccia–Corte. In 1890, the section Ponte-Leccia–Calvi was opened, and in 1894 the line across the interior of the island was completed from Corte to Ajaccio. The construction of these sections cost about 70 million fr., of which the state contributed 50 million fr. There were no further extensions until after the war of 1914–18, when the east coast line was continued south from Ghisonaccia. By 1936, the line was completed and in operation as far as Porto-Vecchio. The last section to Bonifacio was still under construction in 1939; the east coast plain disappears in the south and the line has thus to follow a more difficult route over the hills.

In 1937, the main line companies were merged into one nationalized concern known as the *Société Nationale des Chemins de Fer Français* (*S.N.C.F.*); the *Compagnie des Chemins de Fer Départementaux* however retained its identity.

General Description

The Corsican railway system comprises a main line which crosses the island from north-east to south-west connecting the two main towns of Bastia and Ajaccio via Corte, and two other lines, one from Calvi in the north-west and one along the east coast, which join the first at Ponte-Leccia and at Casamozza respectively (Fig. 51).

The normal schedule of services between Ajaccio and Bastia comprises two trains per day in each direction, one taking 5¾ hr., the

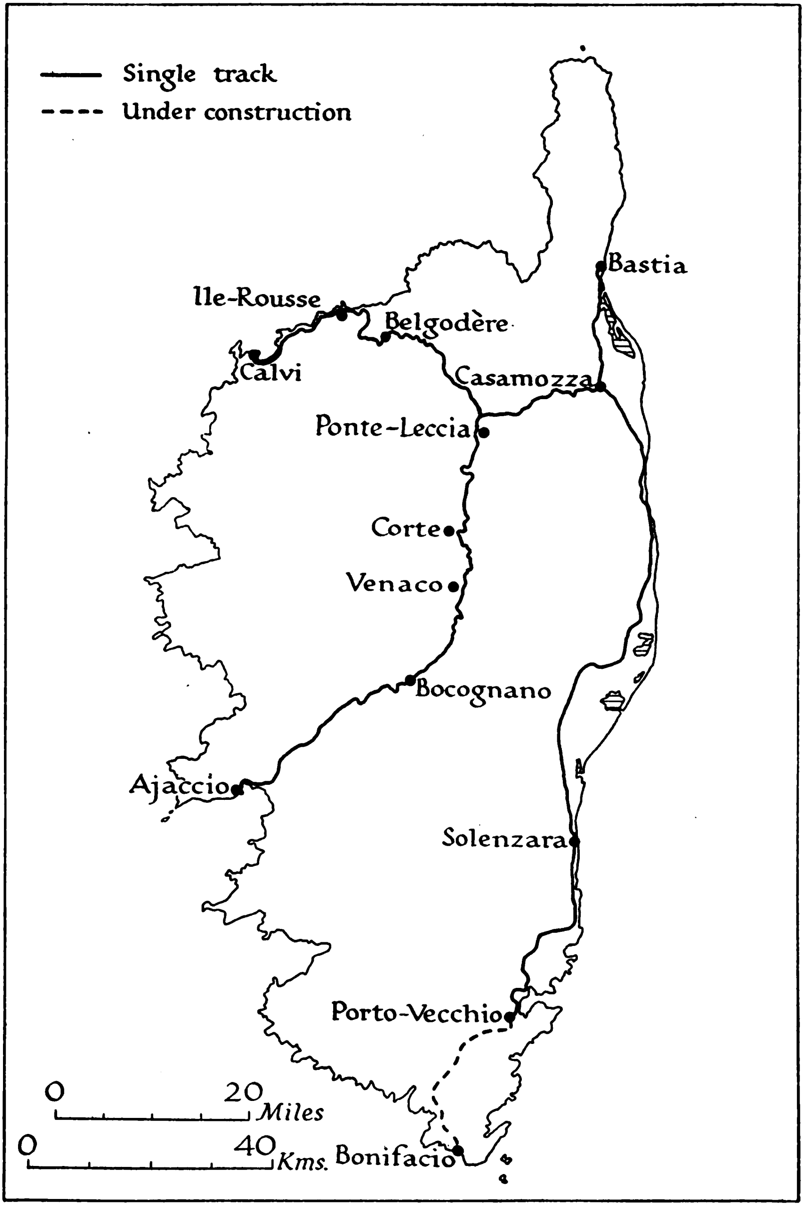


Fig. 51. Railways

Based on 1:500,000 G.S.G.S. No. 4240 (London, 1941).

other over 7 hr. The average speed of the latter is a little over 20 km. per hour. In addition, during the holiday months (March to October), there is a single daily service of *automotrices* (railcars) in each direction, connecting with the steamer arrivals at the ports. The railcars are driven by six-cylinder Diesel engines, and are more comfortable than the steam trains. They take 4 hr. on the journey, considerably less than the steam trains; even so their average speed is under 40 km. per hour. They carry fifty first and second class passengers (Plate 42).

There are four services daily on the east coast line in each direction, of which three are worked by railcars. At Casamozza trains are in some cases divided; one section continues along the east coast, the other goes to Ponte-Leccia. Two services go through to Porto-Vecchio, the railcars taking 3¾ hr. and the steam trains 5½ hr. Other railcars run between Bastia, Folelli-Orezza and Solenzara.

Between Calvi and Ponte-Leccia there is a daily double service of railcars in each direction, making connexions with the Ajaccio-Bastia trains. On four days a week a steam train makes one journey in each direction.

Rolling Stock. In 1939, the available rolling stock consisted of 30 locomotives, 60 passenger coaches, 409 goods wagons and 10 railcars. The maximum loading capacity of the largest wagons is approximately six tons; the locomotives available are incapable of hauling trains of more than 20 to 25 trucks, and most goods trains are made up of considerably fewer.

Traffic. In 1936, the total number of passengers conveyed was 361,000, of whom 6,000 were first class, 75,000 second class, and 280,000 third class. As a substantial number of the first two categories consisted of tourists, it follows that the average number of journeys during the year per head of population was less than one.

The freight traffic totalled only 93,000 metric tons, together with 7,000 animals. This total was made up as follows:

	Thousand metric tons		Thousand metric tons
Cereals and flour	7	Stones	2
Other foods	5	Wine	1
Constructional timber	5	Coal and coke	1
Cement and lime	5	Others	67
		Total	93

Source: *Statistique annuaire des Chemins de Fer français* (Paris, latest edition, 1936).

Geographical Description of Railways

(1) *Ajaccio to Ponte-Leccia* (111 km.). This line crosses the mountainous centre of the island from south-west to north-east. It follows as far as possible a series of valleys, utilizing in part the 'Central Furrow', but is obliged to traverse several cols. The highest point reached is 906 m. at Vizzavone. This route demanded considerable engineering work, including thirty-seven tunnels, the longest of which (under the Col de Vizzavone) is 3·9 km., steep curves, avalanche galleries, cuttings along the rocky sides of ravines and a large number of bridges and viaducts.

At Ajaccio the line runs from the Quai Napoléon, with a short siding along the Jetée de Margonajo, to the station on the north side of the town (Fig. 60). It skirts the north shore of the Golfe d'Ajaccio and runs through the Aspreto tunnel (376 m. long) to the alluvial plain at the head of the gulf. It then follows the steep-sided Gravone valley, via Ucciani (31 km.) and Bocognano (42 km.), climbing to a height of 824 m. in 50 km. For the first 15 km. it follows the north side of the valley, then crosses to the opposite side over a 44 m. bridge, continuing round each lateral valley. The most notable bridges are at Salice (six arches, each with a 14 m. span), at Granato (seven arches, each with a 17 m. span), and at Moraschi (seventeen arches of 5 m. span). The gradient averages 1 : 40 immediately below the point at a height of 824 m., where it enters the Vizzavone tunnel (3,916 m. long) to avoid climbing to the summit (1162 m.) of the Col de Vizzavone (51 km.) (Plate 66). It leaves the tunnel at a height of 906 m., the through gradient being approximately 1 : 48. From this point the railway continues north, taking advantage of the relatively lower 'Central Furrow' through the rugged centre of the island (Fig. 52). It descends through pine forests by a series of zigzags along the right bank of the river Vecchio. The most remarkable of these bends is near Vivario (62 km.), where after a zigzag of 7 km. it is only 300 m. farther down the valley. It crosses the Vecchio itself by a steel viaduct 140 m. long, standing 96 m. above the bed of the river (Fig. 53). The line continues north through Venaco (73 km.) to the upper Tavignano valley at Corte (84 km.) by numerous tunnels and viaducts. It crosses the upper Tavignano and Aghiti rivers and continues north to the Col de San Quilico, below which it passes by a tunnel 700 m. long. It descends by numerous curves to Soveria (93 km.), then swings west to the upper Golo valley. After crossing the river by the Pont de Francardo, it continues on the left side of the Golo to Ponte-Leccia (111 km.), which is situated where the Golo turns abruptly east towards the coast.

(2) *Ponte-Leccia to Casamozza* (26 km.). This section utilizes the transverse valley of the Golo through the uplands of eastern Corsica. After leaving Ponte-Leccia it continues north for 1 km., where the Calvi line branches off to the north-west, then crosses the Tartagine by a viaduct about 50 m. north of its confluence with the Golo (Fig. 54). From this point the line follows the Golo closely, crossing the river four times by viaducts. Immediately south of the last of these, where the Golo reaches the coast plain at a height of 32 m., is the junction with the line to Porto-Vecchio.

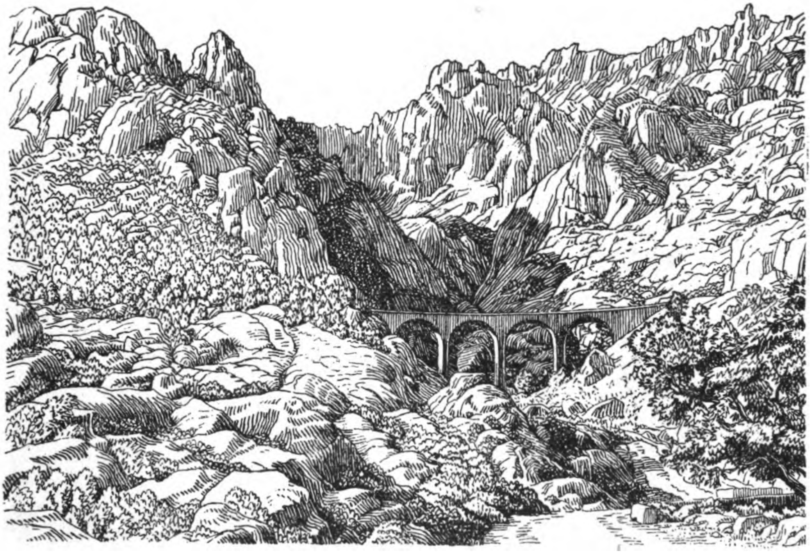


Fig. 52. Routes in the Vecchio valley (drawn from a photograph)

One of the most difficult parts of the route across Corsica between Ajaccio and Bastia is the section along the valley of the Vecchio (a tributary of the Tavignano), between Vivario and Venaco. The railway emerges from a tunnel, crosses a torrent flowing to the Vecchio by a viaduct, and enters another tunnel (see also Fig. 53).

(3) *Ponte-Leccia to Calvi* (74 km.). This line runs approximately northwards and reaches the coast at Ile-Rousse; it then follows the shoreline closely to its terminus at Calvi. The major difficulties are concentrated in the uplands between Ponte-Leccia and the coast, but there are numerous river valleys. The relief is much lower than

in the centre of the island, and the maximum altitude reached is only 500 m.

About 1 km. north of Ponte-Leccia the Calvi line branches off from that to Casamozza, and then crosses the Tartagine river. It continues north-westwards for 18 km. along the valleys of the Tartagine and its headstreams, the Navaccia and Strappato, crossing the main rivers several times. After passing through two tunnels of 248 and 295 m., the line crosses a ridge at a height of 500 m., then runs for 13 km. along the north side of this ridge, making great contoured curves round the tributary valleys. It reaches Belgodère and then descends

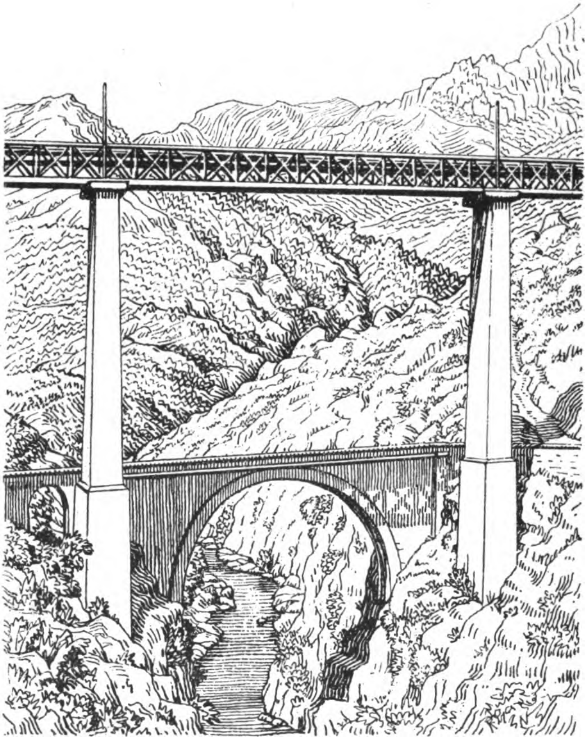


Fig. 53. The road and railway bridges between Vivario and Venaco (drawn from a photograph)

The railway and road cross the river Vecchio some 4 km. north of Vivario by two bridges. The road bridge, with a single arch of 30 m. span, constructed 1825–7, lies below the newer steel railway viaduct, which is 140 m. long and 96 m. above the torrent.

to the Regino valley. It bends north-east, following the left bank of the river for 5 km., then continues west along the coast through Ile-Rousse (52 km.) to the terminus station on the south side of the town of Calvi. The last 2 km. across the sands and marshes of the Golfe de Calvi are on a low embankment (Plate 22).

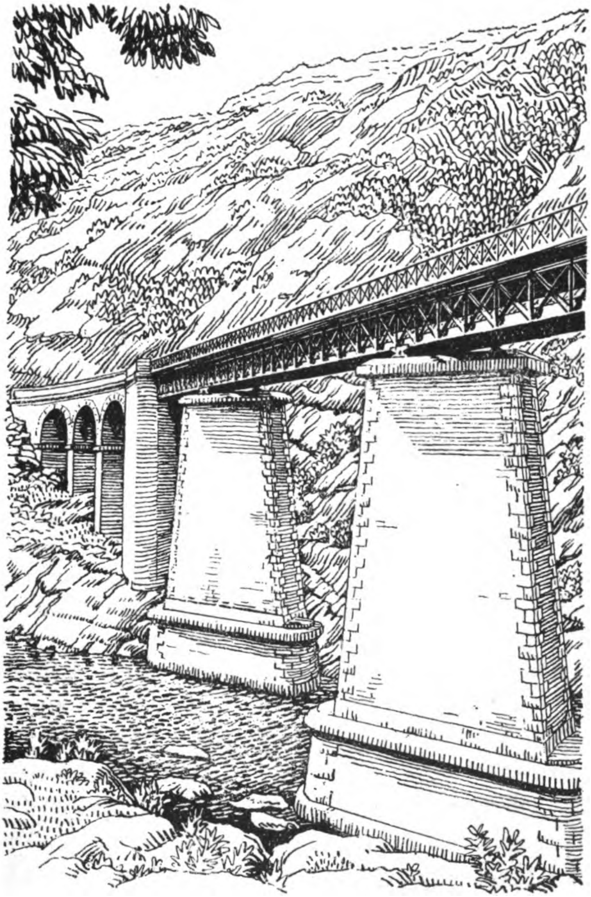


Fig. 54. The railway viaduct near Ponte-Nuovo (drawn from a photograph)

After leaving Ponte-Leccia, the railway at first follows closely the north (left) bank of the river Golo, but after 8 km. it crosses the Gorges de Ponte-Nuovo by the Bismoni viaduct shown in the illustration, disappears into the Albano tunnel, and continues its difficult route along the southern side of the valley.

(4) *Casamozza to Bastia* (21 km.). The marshy terrain, the exten-

sive Étang de Biguglia and the numerous wandering streams of the east coast plain presented many engineering problems. The railway therefore skirts the edge of the foot-hills at an altitude of from 20 to 30 m., and at times is as much as 8 km. from the coastline.

At Bastia the uplands reach the coast, and the line proceeds through a tunnel 1·5 km. long to the station on the north side of the town (Fig. 56). It continues to the Voie des Quais and Quai Nord alongside the Nouveau Port, where the packet-boats disembark their passengers.

(5) *Casamozza to Porto-Vecchio* (131 km.). The coastal plain is lowlying, and this section, together with the preceding one, has no steep gradients. The main difficulties were the numerous *étangs* and areas of marsh which forced the line to swing inland, sometimes on embankments, and the frequent short rivers which cross the coast plain and in winter are of considerable volume. Bridges are therefore numerous. From Casamozza the line trends south-eastwards, then from Folelli-Orezza (11 km.) to Bravone (38 km.) it parallels the coast closely. At Aghione halt, however, it is 10 km. from the shoreline, and at Solenzara (89 km.) it reaches the coast once more.

From Casamozza to Ste Lucie (114 km.) the line follows the edge of the uplands, alternately swinging inland and then returning close to the shore. The remaining section from Ste Lucie makes a detour inland because of the rocky indented coast, and reaches Porto-Vecchio, the present terminus, at the head of the gulf.

The incomplete section from Porto-Vecchio to Bonifacio is the most difficult part of the eastern route, as the coast plain is non-existent, and the shoreline is indented and rugged. The projected line will cut across via the Stabiacco valley to the Figari valley and along a short section of the south-west coast to Bonifacio.

SIGNAL COMMUNICATIONS

The telephonic system of mainland France was linked with Corsica on 1 June 1932 by the opening of two radio-telephonic stations, near the west coast at Ajaccio and at Calenzana. Corsica is included in the *Région Radiophonique de Nice–Côte-d'Azur.*

Telegraphic communication between Corsica and mainland Europe was first inaugurated in 1866, when a single-wire cable was laid between Macinaggio and Leghorn. Twelve years later, a single-wire cable was laid between Antibes and St Florent, supplemented in 1891 by another between Toulon and Ajaccio. Bonifacio is linked with

St Teresa Gallura in Sardinia by a cable laid in 1891. A short cable was laid in 1890 between the Vignola telegraph station at Ajaccio and the lighthouse on the Iles Sanguinaires, and was supplemented in 1933 by a telephonic cable. The following table lists these cables with their lengths:

	Sea miles	Km.
Macinaggio–Leghorn	60·15	111·5
Antibes–St Florent	129·00	239·0
Toulon–Ajaccio	172·54	319·7
Bonifacio–St Teresa	7·64	14·2
Ajaccio–Iles Sanguinaires (telegraphic)	3·32	6·2
Ajaccio–Iles Sanguinaires (telephonic)	3·66	6·8

Source: *Nomenclature des câbles formant le réseau sous-marin du globe*, pp. 18–19 (Berne, 1939).

The number of *communes* with telephonic and telegraphic facilities in 1938 were as follows:

Arrondissement	No. with telephone and telegraph	No. with telegraph alone	No. without either
Ajaccio	62	5	11
Bastia	94	4	32
Corte	57	4	48
Sartène	25	1	21
Total	238	14	112

Source: *Didot-Bottin* (Paris, 1939).

In addition to these, each railway station, some of which are not centres of communes (e.g. Ponte-Leccia), has telegraphic and telephonic facilities.

Aero-radio stations. France is divided into a number of districts for the aeronautical security service. Each district is controlled by a principal aeronautical and direction-finding station, together with a number of auxiliary stations. The two principal stations in Corsica are at Ajaccio and Bastia, with an auxiliary station at the naval air base at Aspreto.

Note on Time

The standard time normally adopted in Corsica, as in mainland France, is that of the Meridian of Greenwich.

One hour of 'Summer Time' is observed from the last Saturday in March, or if that comes before Easter, the Saturday following Easter, to the first Saturday in October.

After July 1940 the occupied zone followed Central European clock-time, i.e., in the occupied zone Summer Time was two hours ahead of G.M.T. In the unoccupied zone, including Corsica, arrangements were altered several times, until on 1 November 1942 they were brought into line with those of the occupied zone.

For the times of sunrise and sunset, duration of twilight, and times of moonrise and moonset, the *Nautical Almanac* should be consulted.

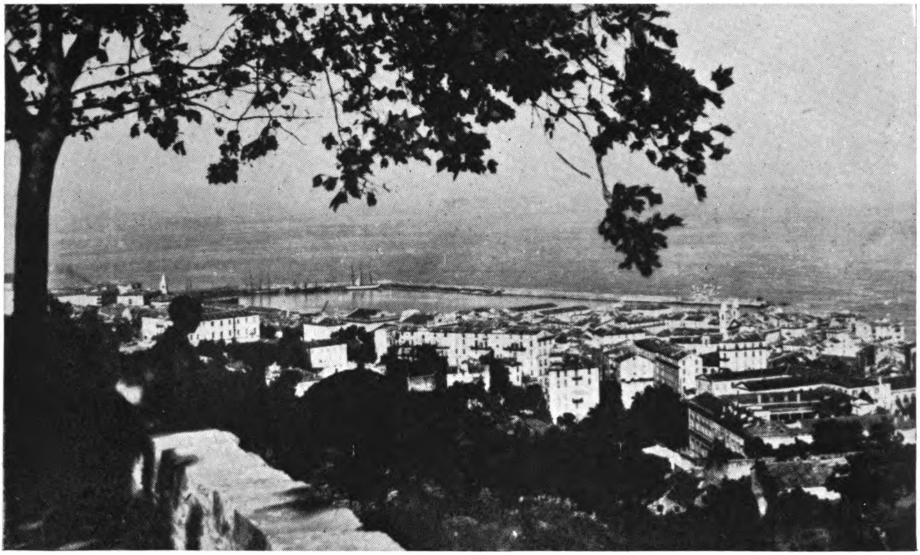


Plate 71. General view of the Port St Nicolas, Bastia (looking north-east)

This photograph, taken from the road above the town to St Florent, shows the long jetty which encloses the Port St Nicolas.

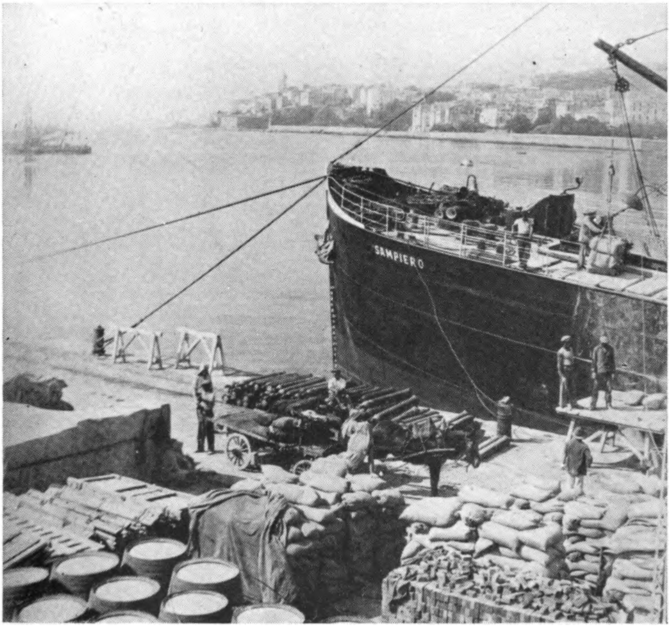


Plate 72. The 'Sampiero' at Bastia (looking south-west)

The 'Sampiero', the largest vessel (3,800 tons gross) to visit Corsica regularly, is lying alongside the Quai Nord. Across the Port St Nicolas can be seen the older part of Bastia, with the two small lighthouses indicating the entrance to the Vieux Port. The dominating spire of the Église Ste Marie can be seen above the *citadelle*. On the left is the seaward end of the Jetée St Nicolas.

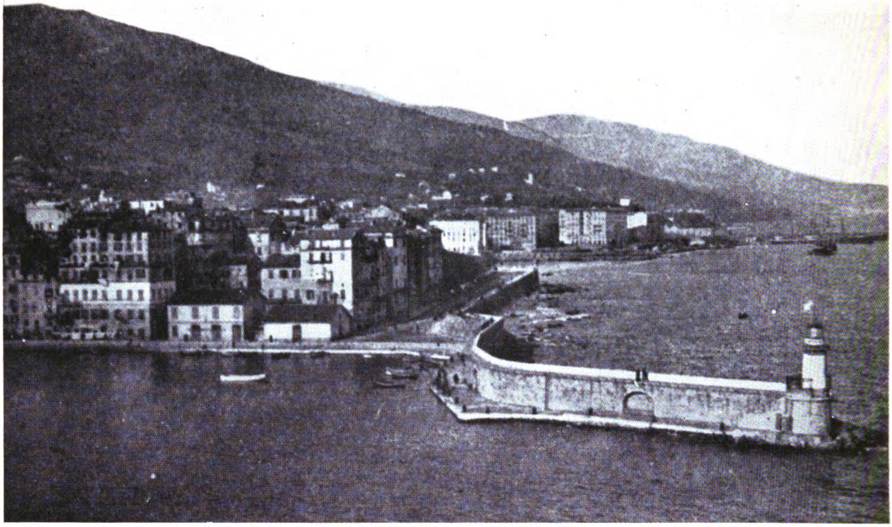


Plate 73. Bastia: the Avant-port and the Vieux Port (looking north)
In the foreground is the Vieux Port, while on the other side of the unnamed jetty is the Avant-port, beyond which lies the Port St Nicolas.

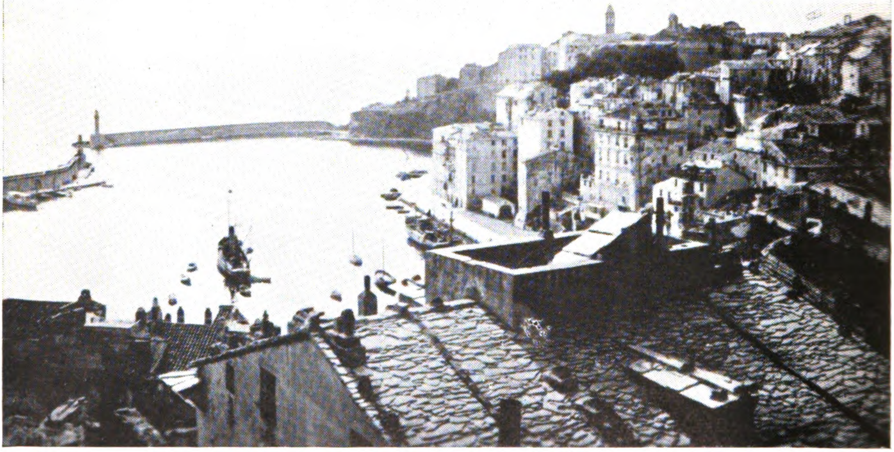


Plate 74. Bastia: the Vieux Port (looking south)
The Vieux Port, now little used except by fishing boats and other small craft, is backed by the picturesque old town (*vieille ville*).

Chapter XI

PORTS AND COMMERCE

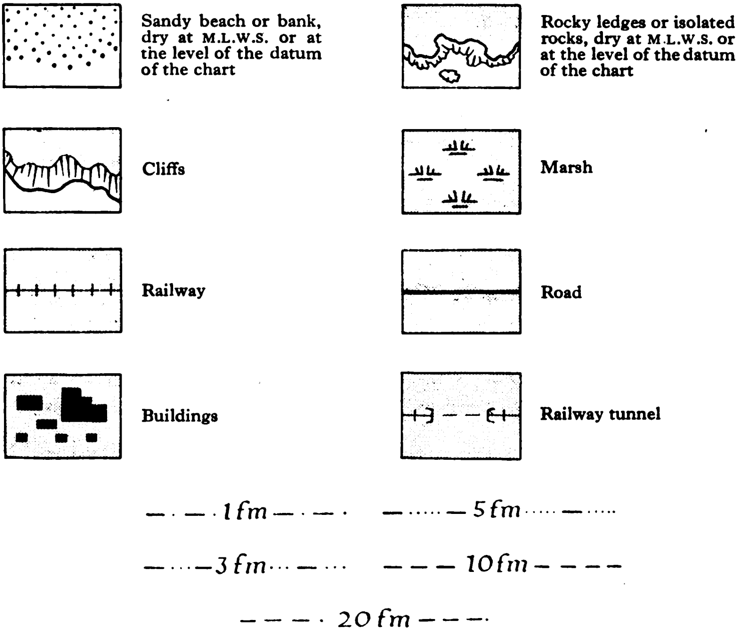
General Features: Bastia: St Florent: Ile-Rousse: Calvi: Ajaccio: Propriano: Bonifacio: Porto-Vecchio: Shipping and Commerce: The Balance of Trade

General Features

Corsica is not very well endowed with natural harbours. Most of the east coast is low and shelving and exposed to easterly winds, while much of the west coast is open to the stronger westerly winds. High and broken ground often reaches close to the shore and limits the amount of space available for buildings and communication facilities. Rarely does a harbour provide a combination of adequate shelter, deep water inshore, room for the handling of ships, and space on shore for storage and railways. Ajaccio approaches most nearly to this ideal. The island, however, does not need a first class port, for the mountainous interior limits the trade demands of the population, and in modern times the position of Corsica near the centre of the western Mediterranean does not count for very much in attracting passing liners. The ports are equipped with few facilities for handling or storing cargo, and in fact there is only one crane in the eight ports. Quays at which sea-going ships can lie alongside are found in only four of the ports, Bastia, Ajaccio, Calvi and Propriano; at Bonifacio and Ile-Rousse there are useful quays but they are not berthable; at St Florent and Porto-Vecchio ships have to anchor some distance from the landing places. The ports of Bastia, Ile-Rousse, Calvi, Ajaccio and Propriano are regularly visited by the ships of *Cie Fraissinet*, which average about 2,500 gross tons, while the *Sampiero*, 3,800 gross tons, belonging to the same company, berths at Bastia (Plate 73).

Owing to the disposition of lower ground in the island, and to the aspect of the various inlets in relation to shelter, the ports of Corsica may be divided into two groups of four. In the north are Bastia, St Florent, Ile-Rousse and Calvi, and in the south are Ajaccio, Propriano, Bonifacio and Porto-Vecchio. Each group includes one of the two most active ports.

Many anchorages are to be found along the north and west coasts of the island, usually at the heads of gulfs. A number of very small harbours are situated on the shores of some of these anchorages, occasionally provided with landing stages or other facilities for small craft. Three of these harbours are officially described as 'ports' in the *Instructions Nautiques*; these are Macinaggio (Plates 15–16), Centuri and Sagone. (For details of these and other anchorages and minor harbours see Chapter III and Appendix IV, pp. 196–201.)


Sandy beach or bank, dry at M.L.W.S. or at the level of the datum of the chart
Rocky ledges or isolated rocks, dry at M.L.W.S. or at the level of the datum of the chart
Cliffs
Marsh
Railway
Road
Buildings
Railway tunnel
1 fm
5 fm
3 fm
10 fm
20 fm

Fathom lines or submarine contours (depth at the level of the lowest tides).

Fig. 55. Key to port plans (Figs. 56–62)

Details of quays, anchorages, etc., numbered or lettered on the plans, are given in the individual underlines.

Owing to the proximity of Toulon, there is no need for a large naval base in Corsica, but lighter units of the French Mediterranean Fleet make some use of Ajaccio as a base (Plate 31), and occasionally call at Bastia. At Ajaccio there are naval installations, as well as a seaplane base at Aspreto nearby (Plate 83).

BASTIA (Fig. 56, Plates 71–4)

Bastia (52,208 inhabitants) is the largest town and port in Corsica, mainly owing to its position near the mainland ports of Marseilles, Toulon, Nice and Leghorn. The east coast is poorly supplied with good harbours, and hence much of the trade of this side of the island has been concentrated in Bastia.

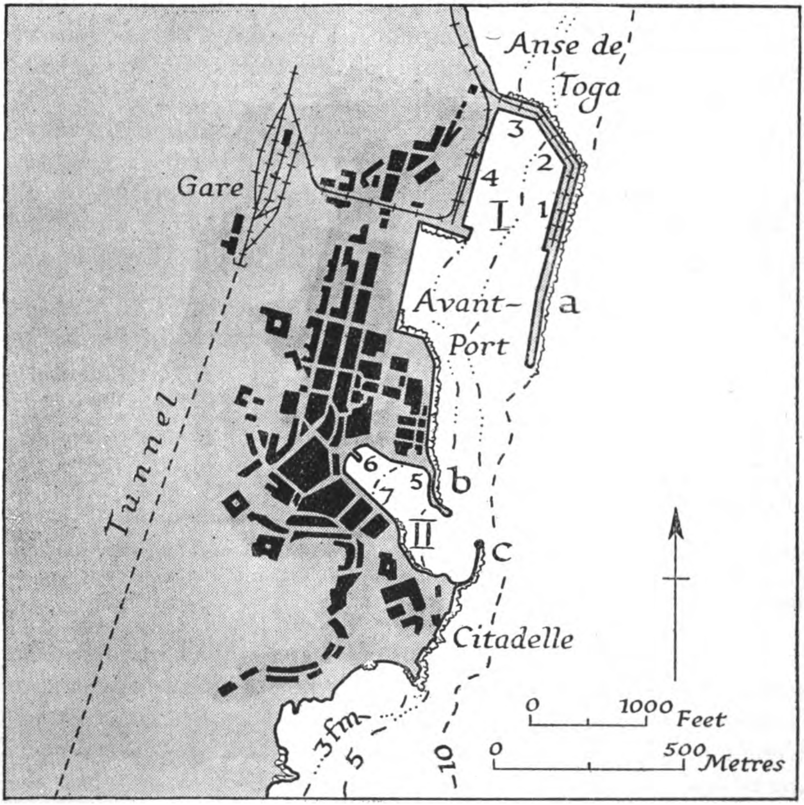


Fig. 56. Bastia

I. Port St Nicolas or Nouveau Port. II. Vieux Port or Ancien Port. (*a*) Jetée St Nicolas. (*b*) Jetée (unnamed). (*c*) Jetée du Dragon. 1. Quai Est. 2. Quai Nord-est. 3. Quai Nord. 4. Quai du Rizi et du Fango. 5. Quai de la Santé. 6. Quai de la Marine. 7. Quai du Sud.

Based on British Admiralty Chart No. 1126 (London, 1933; small corrections, 1940), and on information in *Instructions Nautiques: Mer Méditerranée, France (Côte Sud et Corse etc.)*, pp. 203–4 (Paris, 1932). (See also Plates 71–4.)

The approach is direct from the sea; there is an anchorage 3 km. northwards of Pointe d'Arco in depths of 20 m. (66 ft.), although it is not well sheltered from easterly winds. There are two harbours. The Vieux Port, near the *citadelle* and the older part of the town, is protected seawards by two small jetties. Access is not easy, and easterly seas penetrate between the jetties and make the seaward part of the Avant-Port untenable. This harbour is accessible to vessels drawing less than 5·0 m. (16·4 ft.); although there are two quays for handling cargoes, Quai de la Santé and Quai du Sud, the old harbour is not normally used by sea-going ships. These quays have no railway connexion. Vessels discharging anchor with their sterns to the Quai de la Santé, and unload into lighters.

The modern harbour is Port St Nicolas, lying a little to the north of the old town, and protected from easterly and north-easterly seas by the Jetée St Nicolas. This part of the port is accessible in all weathers and can accommodate vessels up to a length of 150 m. (492 ft.). The four quays provide seven berths, as shown in the following table:

Quay	Draught possible		Berths	Length of quay, m.
	m.	ft.		
Quay Est	8·0	26·2	2	200
Quai Nord-est	5·5	18·0	1	164
Quai Nord	6·0	19·7	1	94
Quai du Rizi et du Fango	6·5	21·3	3	317

Source: The statistics in this and in the table on p. 168 were derived from *Les Ports Maritimes Français*, 1939. Ministère des Travaux Publics (Paris, 1940, unpublished).

These quays all lie at the inner or north end of the harbour; at the seaward end, neither the mainland shore nor the inside of the jetty is quayed. There is one fixed hand crane with a capacity of 8 tons. Urgent minor repairs can be carried out in several well-equipped workshops. Water is laid on at the Quai de la Santé, but the supply in summer is uncertain. Storage capacity is much greater than at Ajaccio: there are 15,000 sq.m. of storage space, and shed accommodation covering 3,100 m. A railway track runs along all the quays of the northern harbour and is connected with the main line. The relief of the neighbourhood restricts the amount of flat ground suitable for railway lines, and the town station, 500 m. inland from the waterside, lies in a specially excavated space.

The favourable position of the town has made it the leading centre of commerce in the island for most of its history. It is the terminus of the railways from Ajaccio and from the east coast, and also of main coastal and interior roads. These facilities, together with its position as nearest port to the mainland, have made it the centre of the mail services.

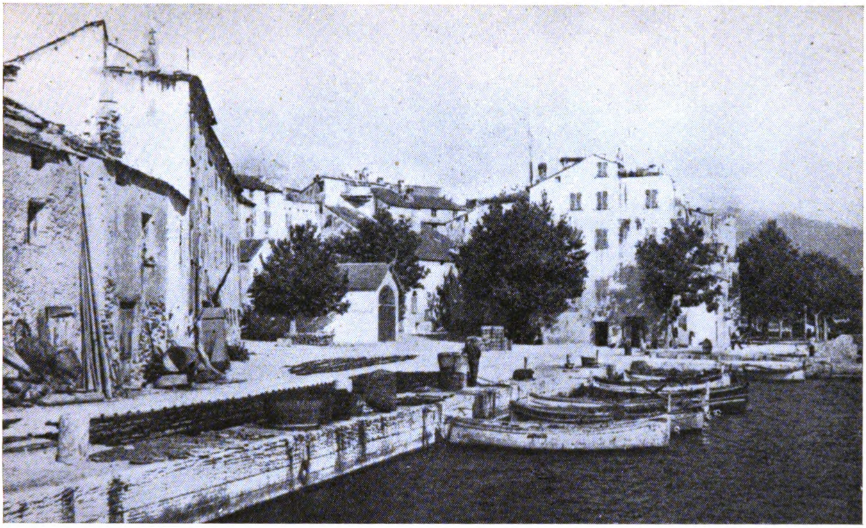


Plate 75. The quays at St Florent

Large vessels are obliged to anchor out in the gulf, and the quays are used only by fishing boats.

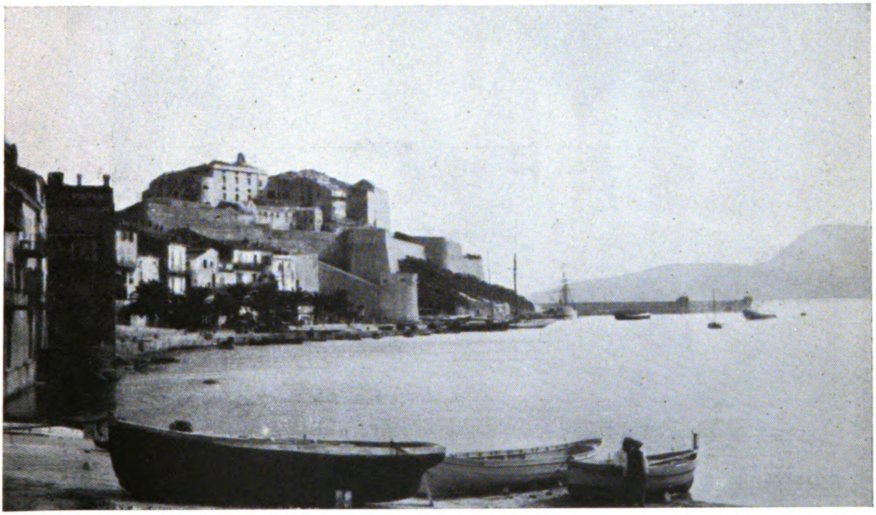


Plate 76. The harbour at Calvi (looking north-east)

The new town (*basse ville*) lies south-west of the *citadelle* along the *marine* or waterfront. The harbour is sheltered by a jetty, built in 1897, which runs south-east from the foot of the promontory on which stands the *citadelle*. The mail steamer quay can be seen at the foot of the walls of the *citadelle* (see also Plate 45).

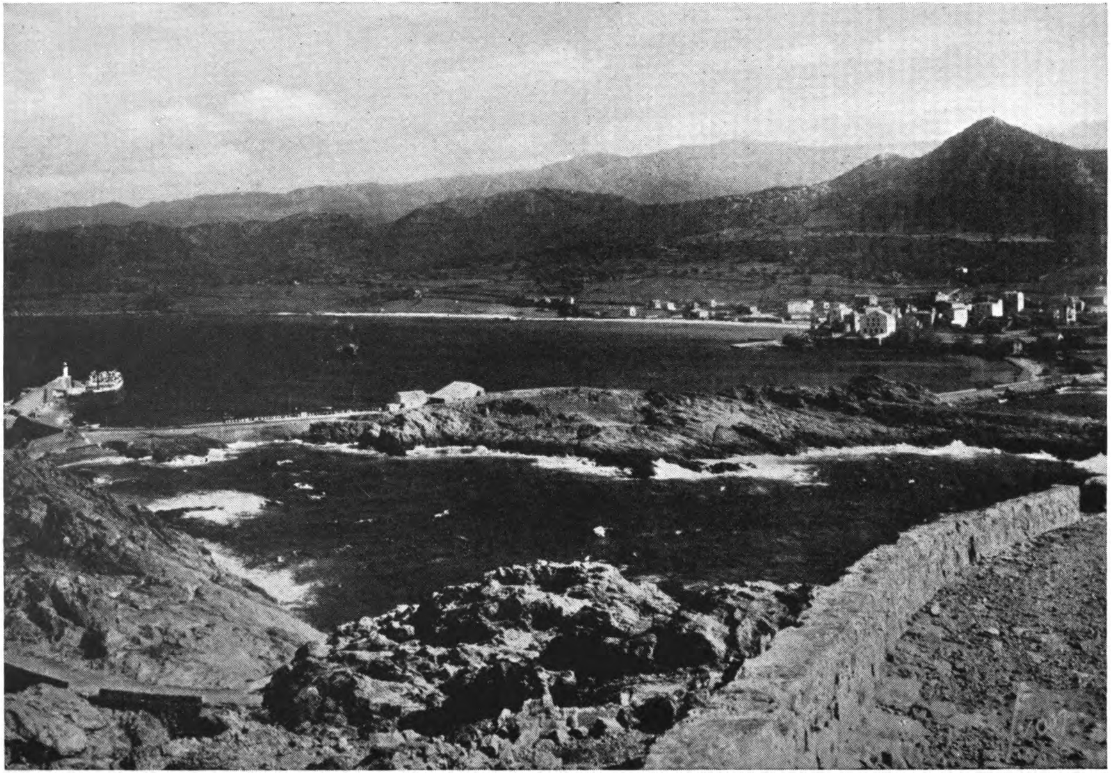


Plate 77. Ile-Rousse: the causeway and mole (looking east)

In the foreground is the rough winding road which leads to the lighthouse on Grande Ile-Rousse (see Plate 21). In the centre is Ile Sicota, joined to the mainland and to Grande Ile-Rousse by a causeway; from it at right angles runs a mole. The flourishing little town is relatively recent in origin, as it was founded by Pasquale Paoli in 1758 to rival the Genoese port of Calvi.

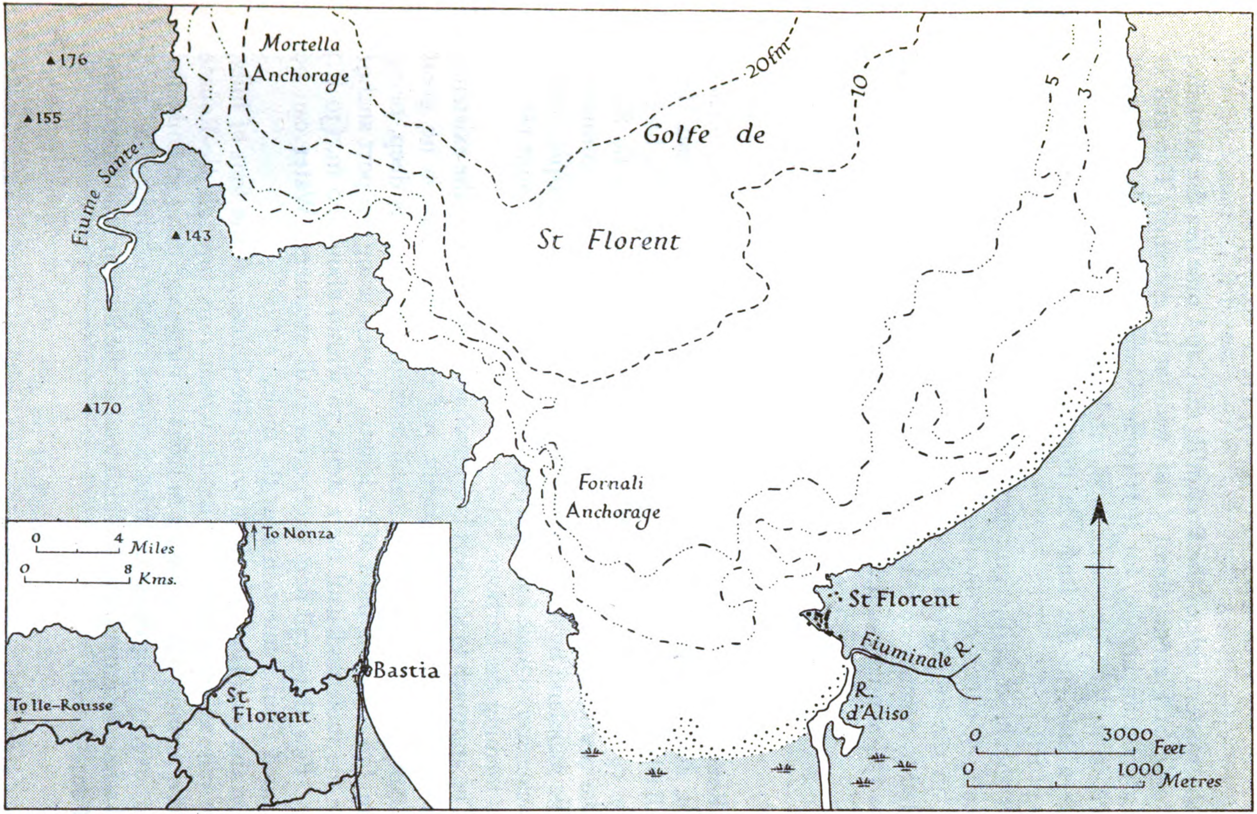


Fig. 57. St Florent

Plan of the Golfe de St Florent based on British Admiralty Chart No. 1083 (London, 1895; small corrections, 1933). Location map based on 1:200 000 *Carte de la France* Sheet 80 (Paris 1930). (See also Plates 20, 75.)

ST FLORENT (Fig. 57, Plates 20, 75)

On the western side of the Presqu'île du Cap Corse lies the extensive Golfe de St Florent, about 5 km. wide at its entrance. The gulf is not a good anchorage, for it is open to northerly winds and swell is felt in it. The best anchorage for large vessels is on the south-western side, in the Rade de Fornali, in depths of 11·9–12·8 m. (39–42 ft.).

At the head of the gulf lies the village of St Florent (1,083 inhabitants), which is connected by road with Bastia. While hardly a port in the proper sense of the term, passengers and cargo can be landed by boats from ships anchored in the gulf, and twenty or thirty ships call annually and load a few hundred tons of cargo.

ILE-ROUSSE (Fig. 58, Plate 77)

Ile-Rousse (2,226 inhabitants) lies on a straight section of the northern coast, and is not favoured by any important bay or roadstead. Two small islands, however, stand just off this shore and enabled a harbour to be constructed. Grande Ile-Rousse to the north, and Ile Sicota to the south, are connected by a causeway; Ile Sicota is connected to the mainland by a causeway over about 400 m. of sandspit. From this causeway a mole has been built south-eastwards for about 180 m., thus forming the harbour.

The approach to this port is somewhat complicated by the existence of a shoal and a bank seawards, but otherwise there is no great difficulty in entering. For a small harbour the water is deep, being 11 m. (36 ft.) along most of its length. Vessels using the port anchor near the mole and haul their sterns to within about 9·0 m. (30 ft.) of it. Few ships call here except for mail steamers. Water can be obtained from a fountain near the mole.

On the mainland lies the town of Ile-Rousse, at the foot of hills. The railway from Calvi to Bastia, which runs through Ile-Rousse before turning inland, passes in front of the town, along an embankment overlooking the sea. Road facilities consist of the coastal road and a few secondary roads, which lead to the interior road from Calvi to Ponte-Leccia.

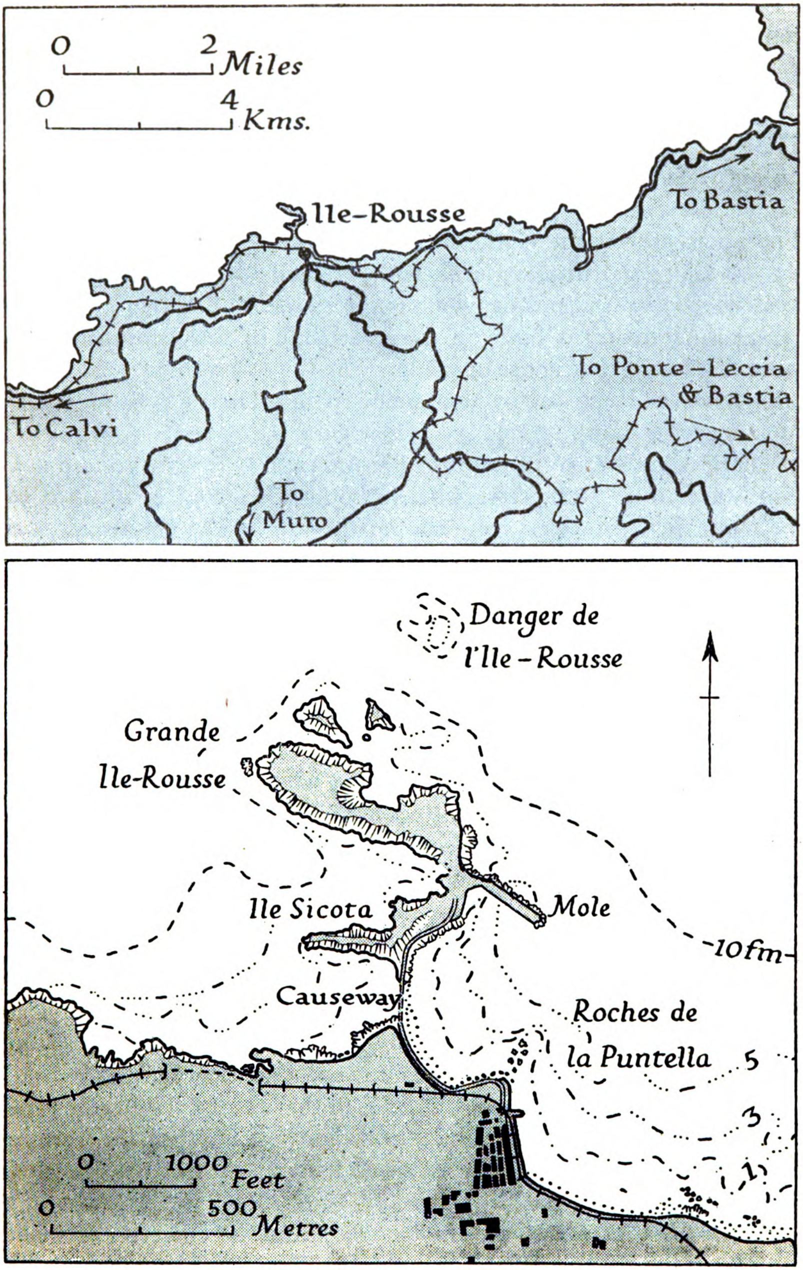


Fig. 58. Ile-Rousse

Port plan based on British Admiralty Chart No. 1126 (London, 1874; large corrections, 1933; small corrections, 1940). Location map based on 1:200,000 *Carte de la France*, Sheet 80 (Paris, 1930). (See also Plate 77.)

Calvi (Fig. 59, Plates 22–3, 45, 76)

The Golfe de Calvi has a deep-water entry. It provides good shelter during westerly and south-westerly winds; north and north-easterly winds raise a sea, but vessels can then secure alongside in the harbour. The inner part of the Golfe de Calvi is an open bay about 2·5 km. across, facing north-westwards with a small rock peninsula at its western side, on the end of which is the *citadelle* of Calvi. The town (2,824 inhabitants) is built on the inner side of this peninsula, and faces eastwards. The shore of the bay consists of a beach fringed with pine trees, and crossed by two small rivers. The railway to Bastia runs near the shore.

There is anchorage in depths of from 12·8 to 14·6 m. (42–48 ft.), southward of a small jetty. The harbour is situated southward of the town; it is protected from the north-west by the peninsula, and from the north-east by the jetty. There are two quays: Quai Nord, at the base of the southern side of the *citadelle*, is 50 m. long and can accommodate vessels drawing less than 6·1 m. (20 ft.); Quai Ouest, or Quai des Pêcheurs, extending along the sea face of the lower town, is about 200 m. long; vessels drawing less than 3·0 m. (10 ft.) can lie alongside it. Traffic is virtually confined to the mail steamers and regular cargo vessels.

Calvi is the starting-point of the railway which runs to Ponte-Leccia and then branches to Bastia and Ajaccio. The coastal road to Ajaccio southwards, and Bastia eastwards, runs through the town, and sends off a branch to the interior and south-east of the island.

Ajaccio (Fig. 60, Plates 31, 80–3)

Ajaccio (37,146 inhabitants) is the second port and city of Corsica, and is the administrative capital. It lies near the head of the deep Golfe d'Ajaccio on the south-western coast of the island. Its site on the western shores of a bay, a little to the west of the head of the gulf, provides better shelter and a healthier position than the Campo dell' Oro, the small alluvial plain around the mouths of the Gravone and Prunelli rivers (Plate 32).

From the open sea the Golfe d'Ajaccio is entered between the Iles Sanguinaires (Plate 29) and the Capo di Muro, which lie about 15 km. apart (Fig. 7). The gulf has water deeper than 100 fathoms for the most part, and as a whole is of little value as an anchorage, for it lies directly open to the dominant south-west winds,

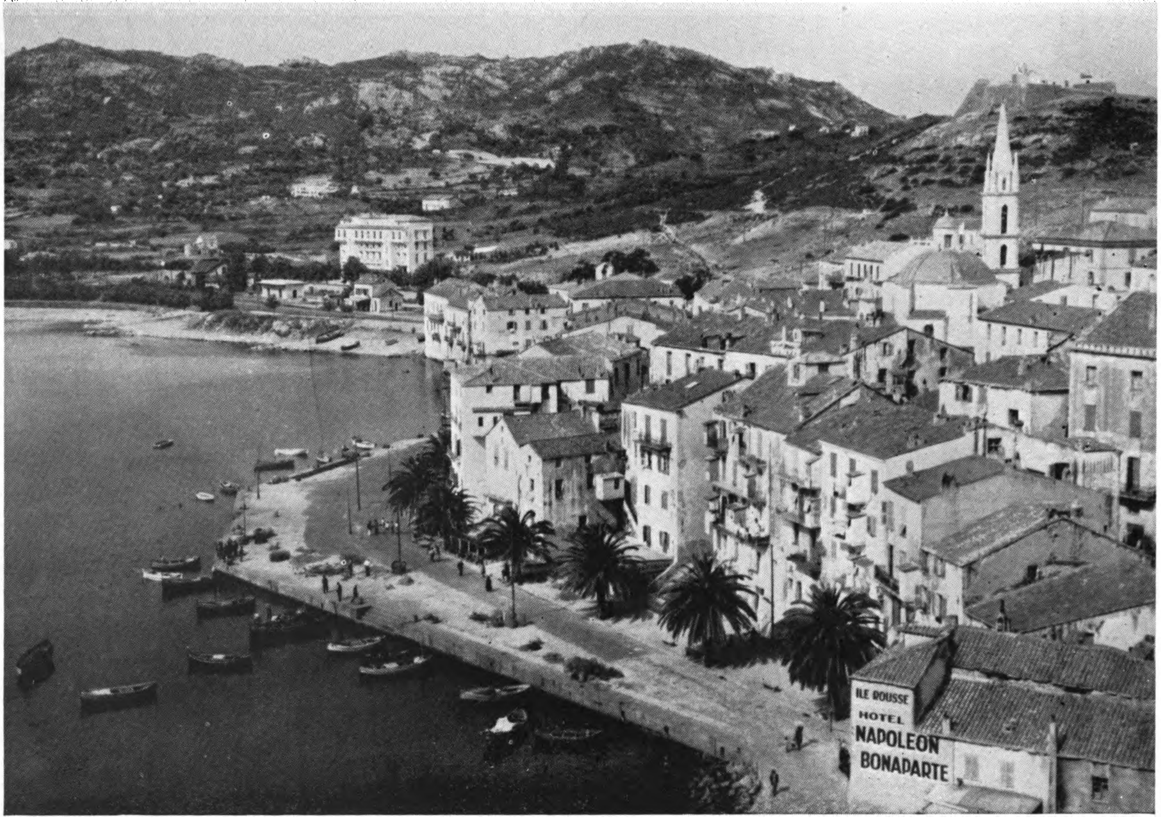


Plate 78. Calvi: the waterfront (looking east)

This shows the new town (*basse ville*) viewed from the *citadelle*.

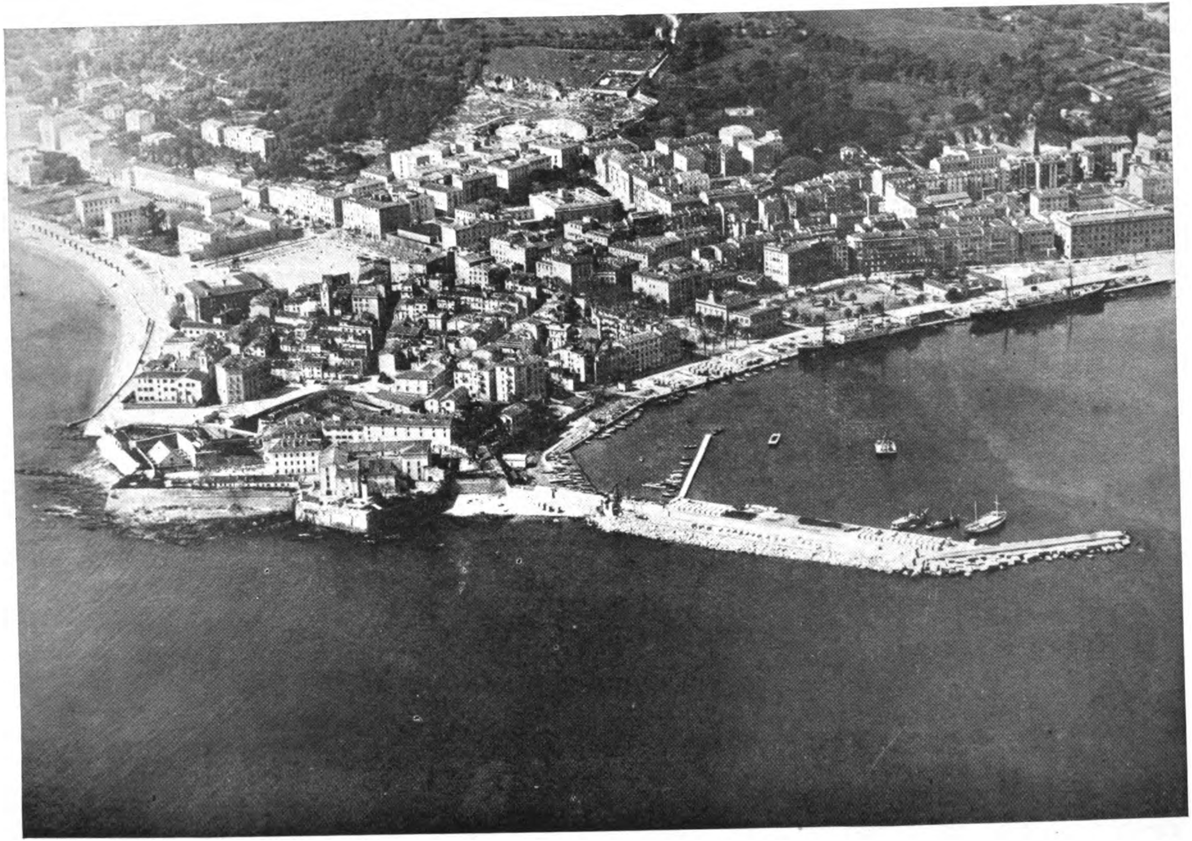


Plate 79. Ajaccio: the *citadelle* and Mouillage de la Ville (looking north-east)

The walled *citadelle* stands on a low rocky promontory. On the left is a sandy beach (Plage de St François), on the right the Mouillage de la Ville. A small lighthouse has been erected since this photograph was taken, on the end of the recently completed extension to the Jetée de la Citadelle.

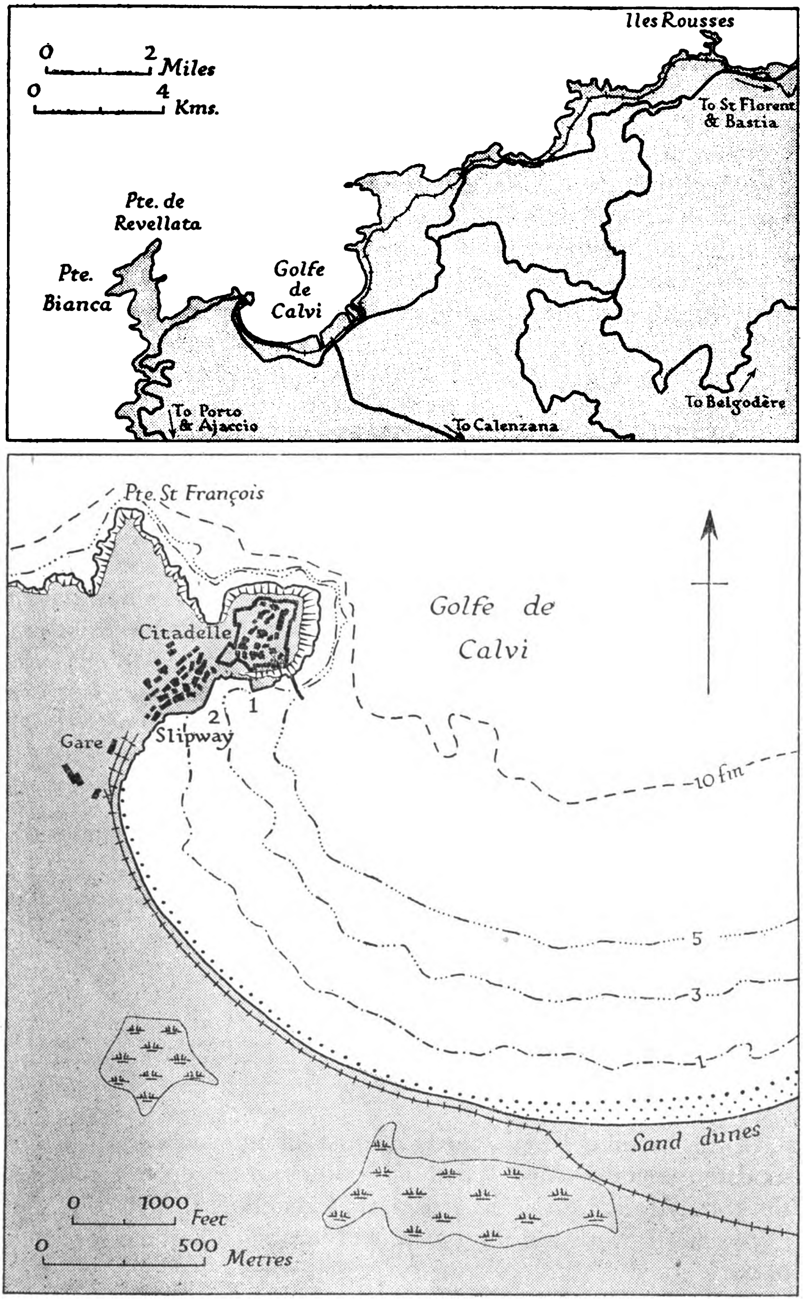


Fig. 59. Calvi

1. Quai Nord. 2. Quai Ouest or Quai des Pêcheurs

Port plan based on French chart, *Mer Méditerranée—Corse*, No. 5635, published by the *Service Hydrographique de la Marine* (Paris, 1931, with revisions to 1938). Location map based on 1:200,000 *Carte de la France*, Sheet 80 (Paris, 1930). (See also Plates 22–3, 45, 76.)

which can produce very heavy seas. The coast is fringed by many rocks. At Ajaccio, however, convenient anchorages can be found, sheltered from all but very exceptional seas. To the east, outside the bay on which the town stands, between the Iles Scoglietti and the Campo dell' Oro beach, is the Aspreto or quarantine anchorage; the principal anchorages, however, lie just off the water front of Ajaccio itself, and are well sheltered from the west by the high ground behind the town and from the south by three jetties running eastwards. North of the Jetée de Margonajo is the Mouillage des Cannes, with depths of 15 m. (49 ft.); this is the normal winter anchorage and is used partly by naval craft. In the centre, between the Jetée de Margonajo and the Jetée des Capucins, is the Mouillage des Capucins with depths of 25 m. (82 ft.), which is reserved for the largest ships. To the south, between the Jetée des Capucins and the Jetée de la Citadelle, is the Mouillage de la Ville, with depths of 6–8 m. (20–26 ft.).

The port itself consists of quays along the water front and along the Jetée de la Citadelle and the Jetée des Capucins. Ships drawing up to 7·0 m. (23 ft.) and not exceeding 150 m. (492 ft.) in length can be accommodated in the Mouillage de la Ville; in the Mouillage des Capucins the southern part is dredged to 5·0 m. (16·4 ft.), with depths of 6·0 m. (19·6 ft.) along the shore in the south-west corner. There are five berths for sea-going ships. Berthing facilities may be summarized as follows:

	Draught		Length	Berths for
	m.	ft.	m.	sea-going ships
Quai de la Jetée de la Citadelle	6·0	19·6	120	1
Quai de la République	7·0	22·9	140	1
	6·5	21·3	180	1
Jetée des Capucins	4·5	14·7	120	—
	5·0	16·4	110	—
	5·5	18·1	100	1
Quai de la Chambre de Commerce	4·0	13·1	80	1

Of this berthing length, 620 m. consists of quays which can accommodate sea-going ships. There are no cranes or repair facilities in the port. At the west of the Jetée de la Citadelle is a small mole, projecting north-westward for 150 m. and forming a harbour for fishing boats.

Storage accommodation is very limited, consisting only of 3,700 sq.m. of storage ground and 590 sq.m. of shed. Water from the town supply can be obtained in the Mouillage des Cannes and Mouillage de la Ville.

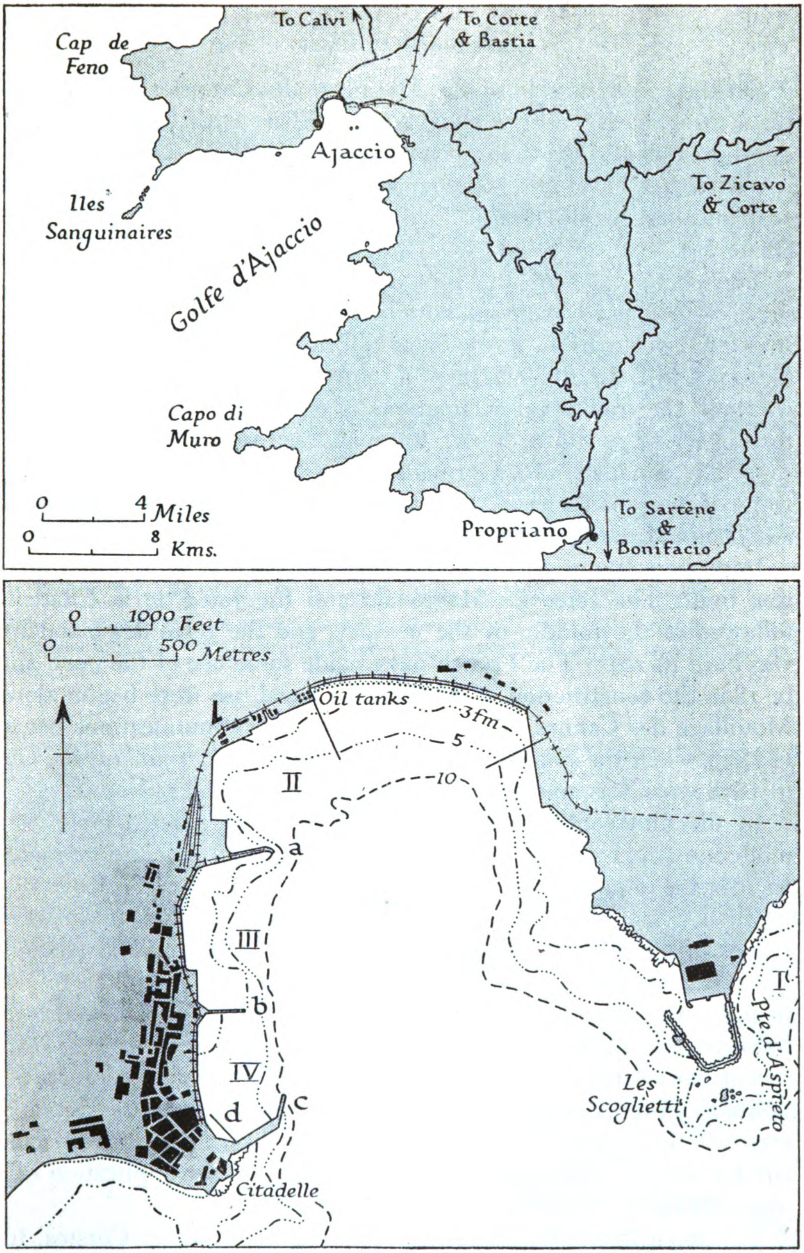


Fig. 60. Ajaccio

I. Mouillage d'Aspreto or Mouillage de la Quarantaine. II. Mouillage des Cannes. III. Mouillage des Capucins. IV. Mouillage de la Ville. (*a*) Jetée de Margonajo. (*b*) Jetée des Capucins. (*c*) Jetée de la Citadelle. (*d*) Môle. The '*petit port des pêcheurs*' behind the *môle* is not named.

Port plan based on British Admiralty Chart No. 1126 (London, 1874; large corrections, 1933; small corrections, 1940). Location map based on 1:200,000 *Carte de a France*, Sheet 81 (Paris, 1930). (See also Fig. 7, Plates 31, 80–3.)

On the southern side of the Mouillage des Cannes there is a seaplane base, and nearby a quay for naval use, with 6·0 m. (19·6 ft.) depth alongside. On the opposite shore at the bay, eastwards, there is a wharf for naval use, together with six mooring buoys. A second seaplane base is situated at Aspreto, equipped with a 25-ton crane (Plate 83).

The occupations of the inhabitants are concerned largely with services such as government, administration and transport. The most important occupation, however, is catering for the needs of tourists (see p. 138). In the nineteenth century the tourist trade rapidly overtook the traditional occupations of fishing and trading, and the town became a winter resort for many semi-permanent residents, especially English and Germans. The 'Route des Sanguinaires' was constructed in 1827, and towards the end of the century an Anglican church and even a Grand Hotel were erected.

Improvements in port facilities began in 1810 when the first quay was built. The Jetée de Margonajo and the Jetée de la Citadelle followed in the middle of the century, and the Jetée des Capucins was built in 1911. The French navy made some use of the port, and in 1890 the construction of wharves for naval use were begun along Mouillage des Cannes. The improvement of communications began in 1836, when the road to Bastia was classified as a *route royale*, and in 1878 work was started on the construction of the railway.

In the nineteenth century the population of Ajaccio grew at a moderate rate, but in recent years growth has been much more rapid. In 1911 the population numbered 19,000, in 1931 it was 24,000, while in 1936 it had jumped to 37,000. There have been three marked causes of growth: the drift of population from the upland villages, the return of *émigrés*, with savings made abroad, who came to live in the town and not in villages, and the expansion of trade and food imports, leading to an increase in the number of merchants. More recent causes have been the immigration of foreigners, sometimes political refugees, sometimes workmen from Italy, and the development of the tourist traffic. The growth of Ajaccio in its restricted site has led to building problems, and 1938 saw the application of a town-planning scheme.

The town is a principal centre of communications in Corsica, for not only is it the terminus of one railway line, but it stands on the main road which skirts the island, and is the starting-point of the road to Bastia, the principal road to cross the interior. Its central position in the western Mediterranean enabled it to become an in-

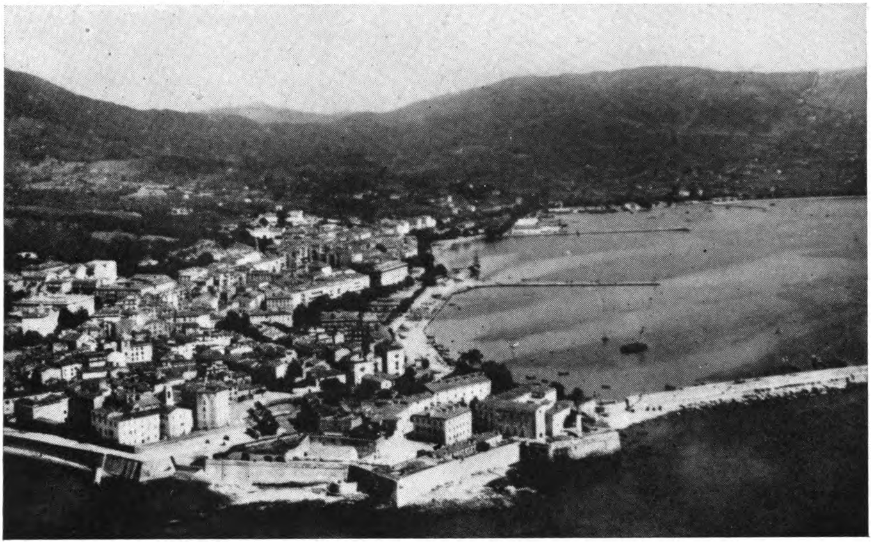


Plate 80. General view of the port of Ajaccio (looking north)

On the promontory in the foreground is the *citadelle*. The three jetties enclosing the anchorages form the main port, although vessels sometimes anchor in the inner gulf (see Plate 31).

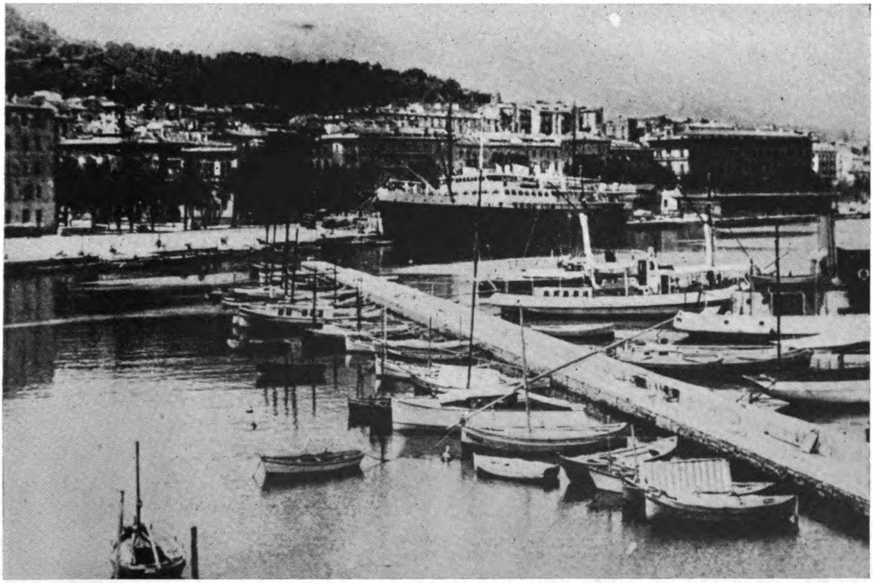


Plate 81. The fishing harbour at Ajaccio (looking north-west)

A small mole, running north-westwards from the Jetée de la Citadelle, forms the 'petit port des pêcheurs', hidden behind buildings on Plate 80. The large vessel is lying alongside the quays of the Mouillage de la Ville. On the left is the Place Maréchal Foch, known until recently as the Place des Palmiers.

Plate 82. The waterfront at Ajaccio (looking north-west)

The waterfront, seen from the Jetée de la Citadelle across the Mouillage de la Ville, is backed by the impressive buildings of the new town.

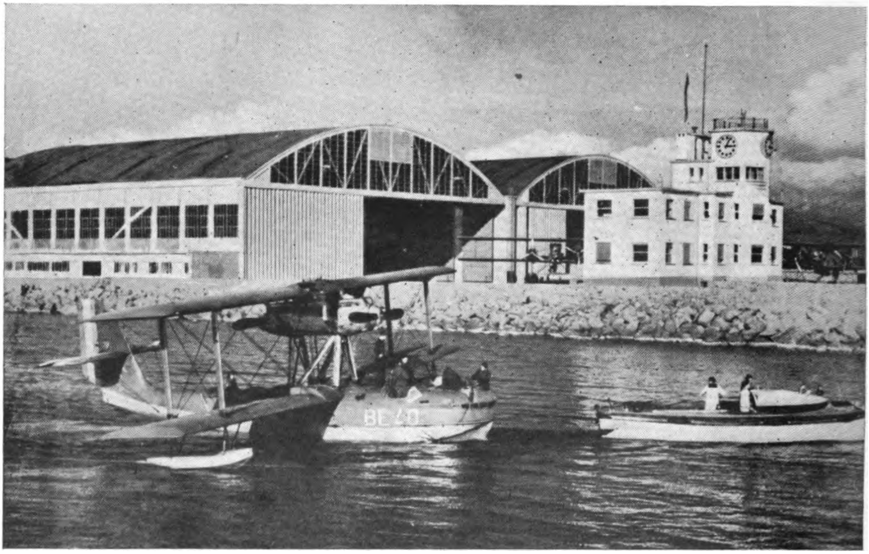


Plate 83. The naval air base at Aspreto

The French government constructed a base for seaplanes at the southern end of the Pte d'Aspreto, on the east of the inner gulf. The two hangars face south, fronted by a concrete platform with a slipway into the water. The landing area is sheltered by a U-shaped breakwater, bordered by the rocks of Les Scoglietti, with an entrance channel at the north-west 70 m. wide. (See Fig. 60.)

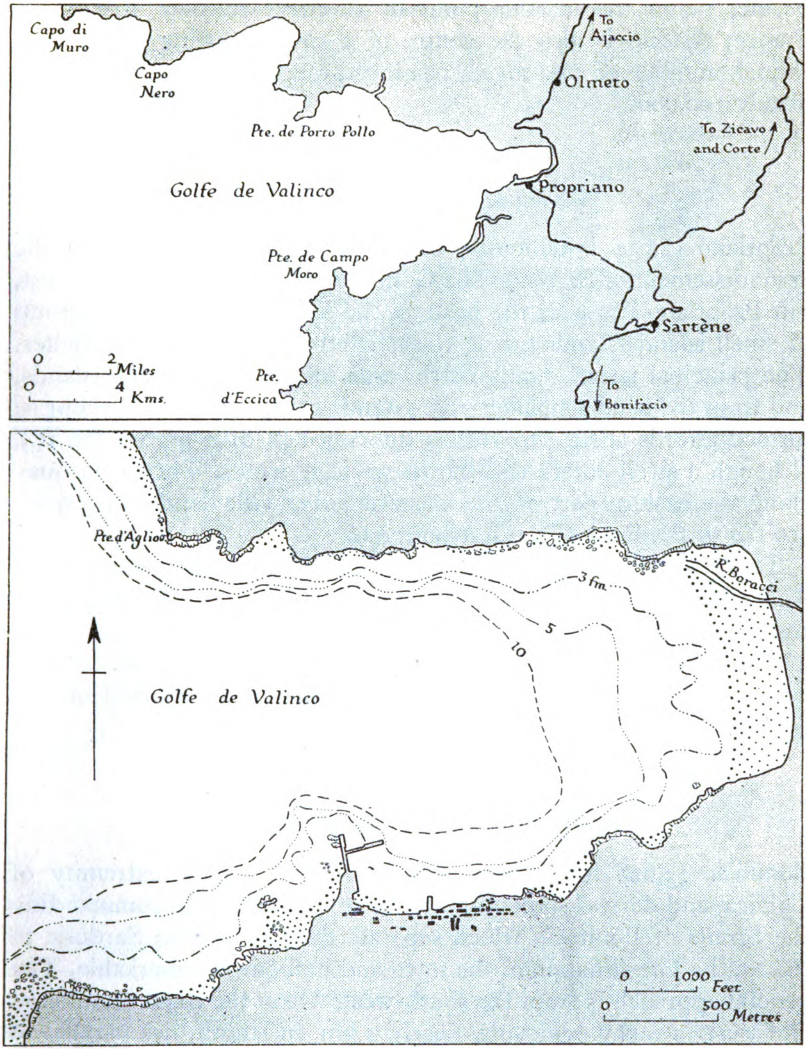


Fig. 61. Propriano

Port plan based on French chart, *Mer Méditerranée—Corse*, No. 5635, published by the *Service Hydrographique de la Marine* (Paris, 1931, with revisions to 1938). Location map based on 1:200,000 *Carte de la France*, Sheet 81 (Paris, 1930). (See also Plate 84.)

termediate stop for the seaplane service from Marignane to Tunis. Besides being the starting-point of frequent steamer services to France, Ajaccio is also the centre of a small coasting trade. The annual number of passengers passing through the port is approximately 100,000.

PROPRIANO (Fig. 61, Plate 84)

Propriano (2,011 inhabitants) is the principal trade outlet of the arrondissement of Sartène. The Golfe de Valinco is open to the west, but Propriano lies near the head on the south shore, where a group of small islands stands out to the north and provides some shelter. The principal jetty extends northwards to the larger of the islands, and from the head a smaller jetty extends eastwards. The harbour so formed affords shelter to vessels drawing less than 6·1 m. (20 ft.), although a swell enters with north-westerly winds. There is a quay along the eastern part of the western jetty, with depths of 4·9 m. (16 ft.) to the head of the northern jetty.

These restricted facilities serve a considerable traffic every year. Ten or twenty vessels engaged in foreign trade call annually, apart from the vessels sailing regularly to French mainland ports.

The village lies along the shore. Communications consist of two main roads, one to Sartène 13 km. to the south-east, and one to Ajaccio 72 km. to the north.

BONIFACIO (Fig. 62, Plates 33, 85–6)

Bonifacio (3,628 inhabitants) lies near the southern extremity of Corsica, and derives some importance from its position commanding the Straits of Bonifacio which separate the island from Sardinia to the south. The situation of the town and harbour is remarkable. The general approach is from the south-west, where the coast trends east and west; a rocky peninsula, nearly 2 km. in length, lies parallel to the shore and about 100 m. distant from it, forming a well-protected harbour of the same length. The port lies at the head of this inlet, and from the sea the narrow entrance to the harbour cannot easily be distinguished. The old town has a cramped situation half way along the peninsula, and space restriction has resulted in extremely narrow streets and very tall buildings. The town is enclosed almost entirely within high walls, dominated by the *citadelle* (Plate 46); access is over two drawbridges. In recent years the new town has developed outside the *citadelle* round the head of the harbour.

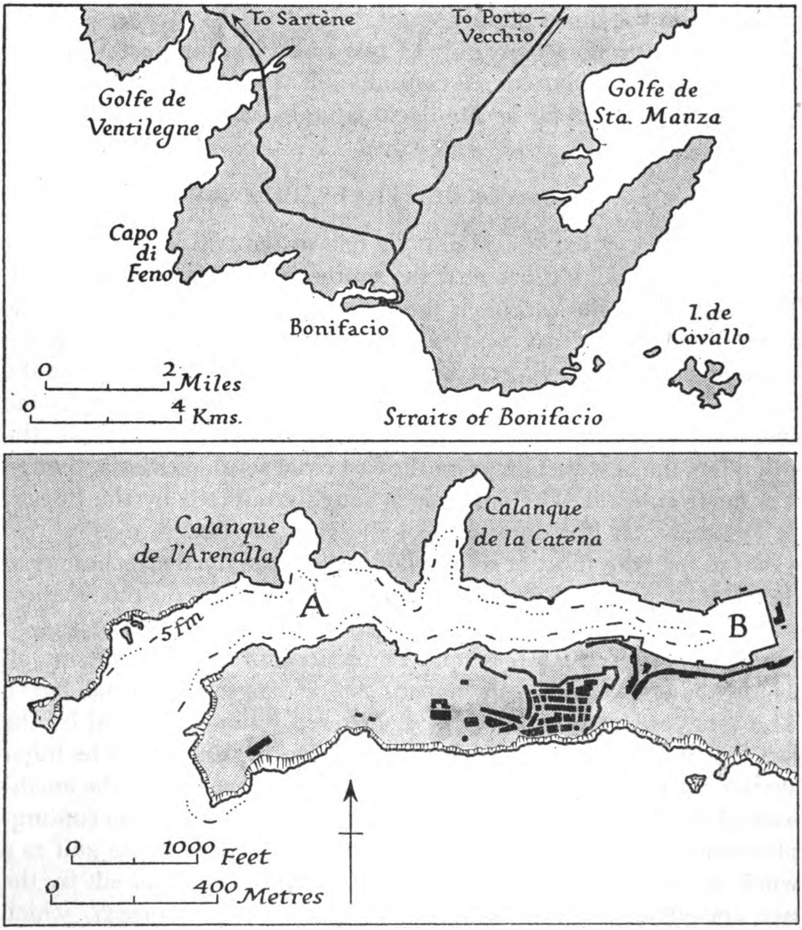


Fig. 62. Bonifacio

A. Outer Port. **B.** Inner Port.

Port plan based on British Admiralty Chart No. 1126 (London, 1874; large corrections, 1933; small corrections, 1940). Location map based on 1:200,000 *Carte de la France*, Sheet 81 (Paris, 1930). (See also Fig. 5, Plates 33, 85–6.)

The port itself has depths of 3·4–5·8 m. (11–19 ft.), sufficient to accommodate mail steamers. At the eastern end there are three quays, but the water alongside is shallow, and vessels of any size must lie away from them. The mail steamer lies about 6·1 m. (20 ft.) off the south quay, several short landing stages between ship and shore being employed. Mooring arrangements are rather complicated, but in spite of this the port is visited by a large number of vessels. Two fountains on the quays supply water.

Communications consist only of two roads leading northwards to Porto-Vecchio and Sartène. A continuation of the railway from Bastia to Porto-Vecchio as far as Bonifacio is under construction.

PORTO-VECCHIO (Fig. 63, Plate 36)

Porto-Vecchio (5,304 inhabitants) is one of the two east coast ports of Corsica, although it lies near the southern extremity of the island. The Golfe de Porto-Vecchio is the larger of the only two considerable inlets found on the east coast. The entrance between Pte St Cyprien and Pte de Chiappa is 21·5 km. wide, but in the central part the shores are only 1 km. apart, while the Banc Benedetto narrows the effective width to little more than half that distance. As a whole, the gulf offers the best anchorage on the east coast south of Bastia, though it is far from ideal. The entrance is roughly bisected by the Roches de Pecorella. In the outer part of the gulf, depths are mostly over 9 m. (30 ft.) with most of the shallows along the northern shore near the Banc Benedetto. Anchorage can be found outside this shallow water, in depths of 10–20 m. (33–66 ft.); it is suitable for large vessels, but is exposed to easterly winds. The inner gulf is sheltered from all winds, though westerly wind squalls can be dangerous to small boats. The value of this inner stretch of sheltered water is reduced by the fact that it is limited to vessels of 6·0 m. (20 ft.) draught. The inner anchorage, with depths of 6–7 m. (20–23 ft.), lies a little to the north-west of Ile Ziglioni, roughly half-way between Porto-Vecchio landing-place and the entrance to the inner gulf. The depths in the gulf as a whole are tending to decrease owing to the deposition of silt by the two considerable rivers which flow into it: the Stabiacco, which reaches the head of the gulf from the south-west, and the Oso, which enters the central parts from the north, where its silt-laden waters are extending the Banc Benedetto.

Facilities at Porto-Vecchio consist only of a quay about 150 m. long, from which a 50 m. jetty projects at right angles, usable only by boats, for the approach is through shallow water and difficult channels. Drinking water can be obtained from a fountain on the quay, or from a cork factory nearby. Over a hundred vessels, including many sailing-ships, make use of the port annually, however,

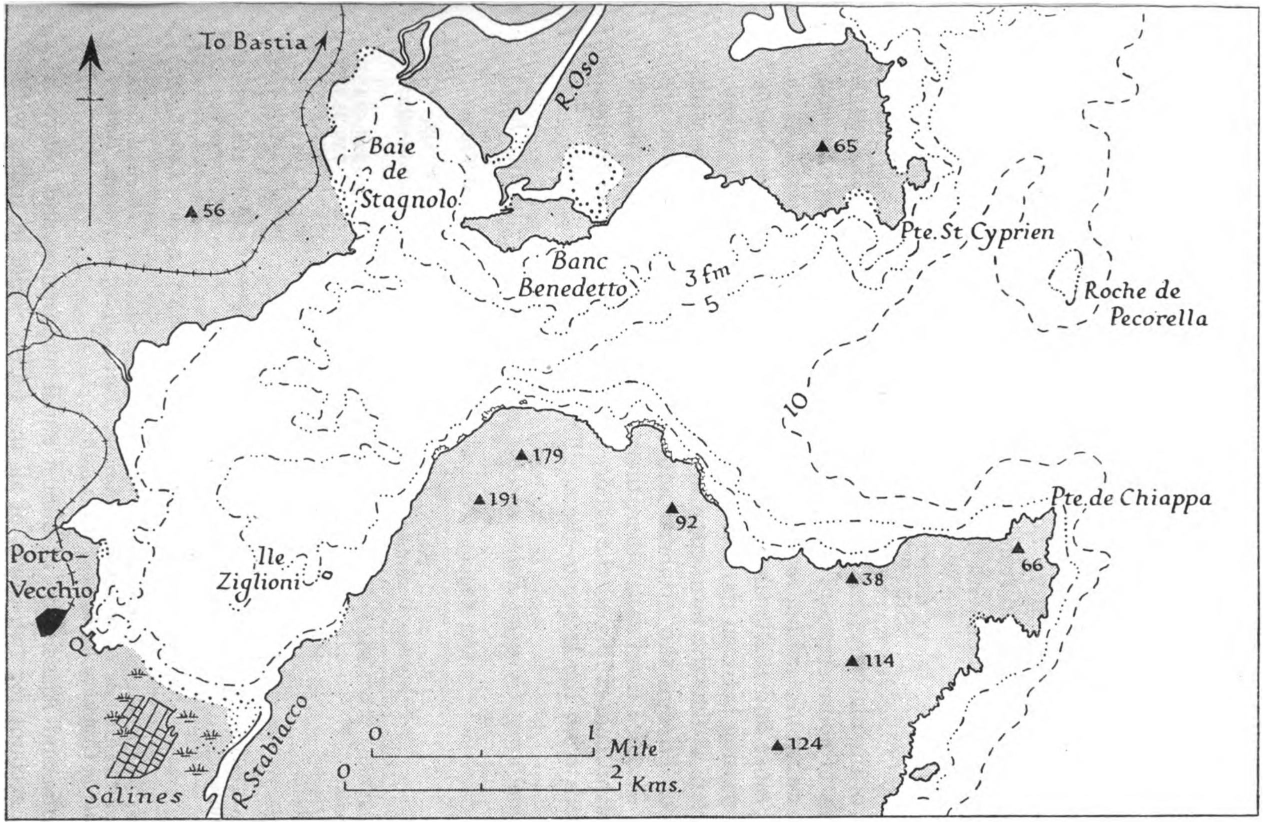


Fig. 63. Porto-Vecchio

Q. Quay. The gulf is divided into two anchorages, the Mouillage intérieur west of the Banc Benedetto, and the Mouillage extérieur to the east of it.

Production of salt by evaporation from the *salines* or salt pans, near Porto-Vecchio, has greatly increased in importance during recent years.

Based on British Admiralty Chart No. 1126 (London, 1874; large corrections, 1933; small corrections, 1940).

including mail steamers. Very few of these ships engage in trade outside the island and the French mainland. Of cargo handled, the outstanding item is timber, amounting to an annual export of about 1,000 tons; salt and cork are also exported.

Porto-Vecchio has a striking position on a conical hill. Its communications have been considerably improved in recent years, for it is now the southern terminus of the east coast railway from Bastia, the southern section from Solenzara having been completed only in 1936. The main road from Bastia to Bonifacio passes through the town; communication with the interior is effected only by a secondary road.

SHIPPING AND COMMERCE

Most of the maritime traffic of Corsica appears in the official French returns of commerce and navigation as 'coastal'. The term coastal is somewhat misleading, for it covers both the traffic between Corsica and France and the local coasting trade. The amount of sea-borne trade passing between the various Corsican ports is extremely small, however, so that the term coasting trade means virtually trade with France. Though the northern and southern ports of Corsica are some distance from each other, there is not much that one part of the island can supply to the other, and there is little transhipment of goods from the larger to the smaller ports.

Shipping using Corsican Ports, entered and cleared, 1937 (*metric tons*)

	All shipping		Foreign Trade		Coastal Trade	
	No. of ships	Net tonnage	No. of ships	Net tonnage	No. of ships	Net tonnage
Bastia	1,092	1,098,870	625	558,447	467	540,423
Ajaccio	1,022	1,052,829	288	293,076	734	759,753
Propriano	417	409,759	34	13,174	383	396,585
Bonifacio	726	296,633	522	80,434	204	216,199
Calvi	328	225,800	2	86	326	225,714
Ile-Rousse	271	187,374	7	5,163	264	182,211
Porto-Vecchio	134	113,621	19	1,283	115	112,338
St Florent	43	32,607	—	—	43	32,607
	4,033	3,417,493	1,497	951,663	2,536	2,465,830

Source: The statistics in this and in the succeeding tables were derived from *Tableau Générale de la Navigation Maritime* (Paris, 1938), and from *Tableau Générale du Commerce Extérieur* (Paris, 1938).

Bastia and Ajaccio are of almost equal importance and between them account for two-thirds of all the traffic, while in traffic with foreign countries they are absolutely dominant and handle nearly nine-tenths. Bastia handles more foreign shipping than Ajaccio, but less coastal shipping. The only other port to handle any considerable amount of foreign traffic is Bonifacio, but this comprises a large number of very small vessels, trading largely with Italy and with nearby Sardinia.

To a very great extent the commercial life of the island has become tributary to that of France, so that the cross-sea connexion is all important; as the island is a part of the highly centralized French state, the passenger traffic is considerable. An extensive and regular service of packet and mail steamers has been established, operated by one company, with sailings from Marseilles, Nice and Toulon (see p. 139). These steamers are able to serve all the ports of the island except St Florent. Regular cargo lines operate from the three ports which control the passenger traffic, and from Sète and Port-St Louis-du-Rhône, while some cargo moves directly from the French Atlantic and Channel ports. Corsica itself owns no ships of any size; only eighty vessels are registered in the island, and all are very small craft.

The foreign traffic is limited in scope and represents very little cargo trade which is independent of the French economy. The greater part of the foreign trade is with Italy and most of the remainder with French North Africa. The Italian trade, which passes mainly through Bastia, is fostered to a great extent by the Italian government in pursuit of cultural and political aims. Owing to the many Italians resident in Corsica, this traffic is largely confined to passengers and mails. The North African trade centres upon the imports of wine and cereals. The following table indicates the principal countries with which Corsica trades:

Entries of Shipping from Countries outside France, 1937 (*metric tons*)

	Italy		North Africa		Great Britain		Others		Total	
Port	No. of ships	Net tonnage	No. of ships	Net tonnage	No. of ships	Net tonnage	No. of ships	Net tonnage	No. of ships	Net tonnage
Calvi	1	43	—	—	—	—	—	—	1	43
Ile-Rousse	3	136	1	4,891	—	—	—	—	4	5,027
Bastia	272	233,768	38	37,030	6	5,532	2	1,916	318	278,246
Porto-Vecchio	9	391	—	—	—	—	2	552	11	943
Bonifacio	260	39,143	1	1,073	—	—	—	—	261	40,216
Propriano	8	567	—	—	3	1,766	—	—	11	2,333
Ajaccio	30	2,642	105	110,264	5	3,058	—	—	140	115,964
Total	583	276,690	145	153,258	14	10,356	4	2,468	746	442,772

The Corsican ports handle a considerable mail and passenger business between the island and the rest of France. As a result, the amount of shipping using the ports is very large compared with the amount of cargo handled. The total weight of merchandise which moved through them in 1937 was 248,000 tons, while the shipping tonnage was 3,400,000. In cargo traffic, both cross sea and foreign, Bastia has a definite lead among the ports of the island, and the two principal ports handle about four-fifths of the total cargo movement. Of the secondary ports only Ile-Rousse and Propriano deal with any appreciable amount.

Weight of cargo handled, by ports, 1937 (*metric tons*)

	Coastal		Foreign		
	Imports	Exports	Imports	Exports	Total
Bastia*	50,812	18,264	45,662	11,939	126,677
Ajaccio	50,164	8,442	19,445	2,517	80,568
Propriano	11,120	2,816	2,495	652	17,083
Ile-Rousse	7,701	1,453	292	12	9,458
Porto-Vecchio	3,315	1,210	718	12	5,255
Bonifacio	2,943	524	150	535	4,152
Calvi	3,361	672	—	40	4,073
St Florent	639	34	—	6	679
Total	130,055	33,415	68,762	15,713	247,945

* Including Macinaggio, Solenzara and Prunete.

Of the total under 'coastal', only 7,000 tons moved between the Corsican ports themselves.

Of cargo moving in both directions between Corsica and France over one-half is handled by Marseilles, while Nice and Port-St Louis-du-Rhône together deal with one-third. Small quantities of cargo pass between Corsica and the Atlantic and Channel ports, as far as Dunkirk.

Of the total imports, both from foreign and French ports, the greater part is made up of five main items—cereals and flour (31,000 tons), coal (17,000 tons), which is used almost entirely for railways, gas-works and power stations, building materials (40,000 tons), in spite of the island's wealth of building stone, mineral oil (16,000 tons) chiefly for the *S.N.C.F.* bus services and Diesel railcars, and manufactured goods (18,000 tons). Most of the remaining imports consist of food and drink, notably potatoes, wine from Algeria and Tunisia, livestock and meat, sugar, coffee and tobacco. It is a striking reflec-

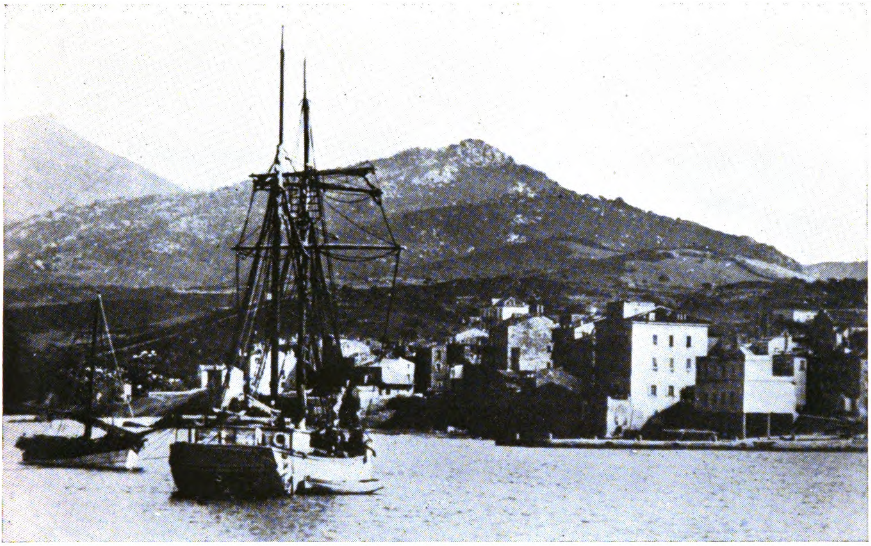


Plate 84. Propriano (looking south)

Although port facilities are inadequate, Propriano carries on a considerable trade in charcoal, timber, leather and wine, and is the third most important port in the island.

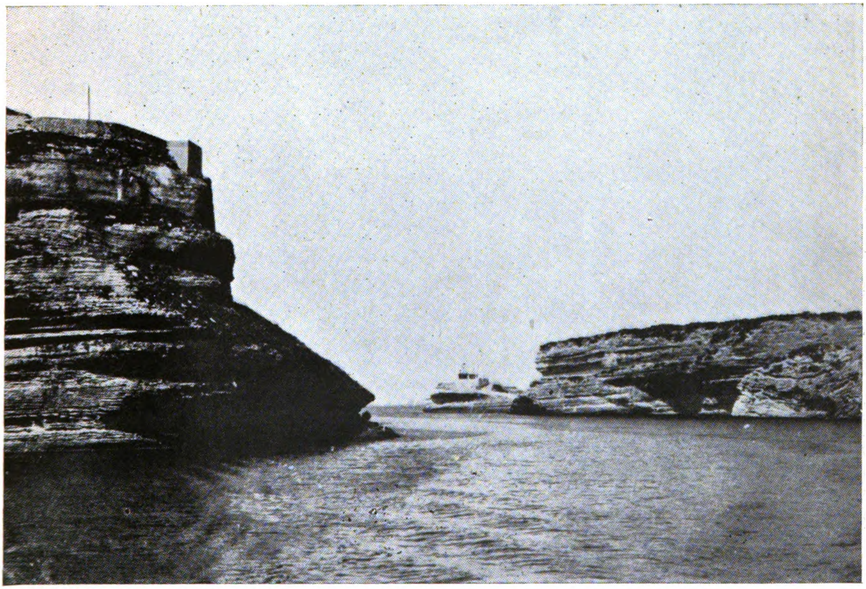


Plate 85. The entrance to the Baie de Bonifacio (looking south-west)

On the Pta della Madonetta is a small lighthouse, marking the narrow entrance, in places little over 200 m. wide, to the bay. On the left are the cliffs at the end of the long peninsula, on which stand the *citadelle* and old town.

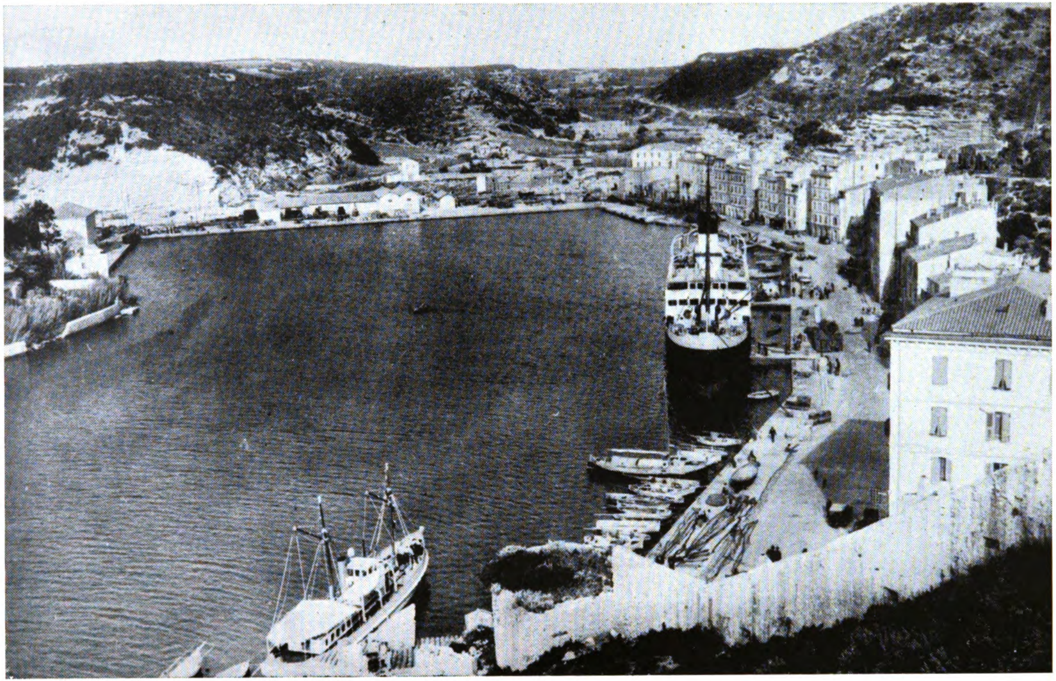


Plate 86. The port at Bonifacio (looking east from the *citadelle*)

The head of the Golfe de Bonifacio is lined with quays; the water, however, is too shallow for the quays to be berthable by large vessels, which have to lie several metres away from the quay face. On the right are the buildings of the newer part of the town.

tion upon the economic state of the island that a country which is primarily agricultural should be obliged to import almost one-third of its food.

Cargo handled by French Mainland Ports in Trade with Corsica, 1937 (*metric tons*)

	Imports into Corsica	Exports from Corsica	Total
Marseilles	69,531	15,330	84,861
Nice	32,144	3,697	35,841
Port-St Louis-du-Rhône	11,633	2,876	14,509
Port-de-Bouc	4,934	1,345	6,279
Sète	3,111	1,418	4,529
Havre	429	3,620	4,049
Other mainland ports	4,598	1,612	6,210
All mainland ports	126,380	29,898	156,278

The weight of exports represents a quarter of the weight of imports. The main items are those derived from the woods of Corsica, notably timber (7,000 tons), chiefly pine, but including some oak, chestnut extract or tannic acid (5,000 tons) for tanning, cork and charcoal, which is in considerable demand for the manufacture of respirators. Manufactured articles consist almost entirely of pipe-stems hewn from heath roots, which are sent to the Jura to be finished. Chestnuts, walnuts and fruits are exported in small amounts, the fruit including table varieties of oranges, peaches, nectarines, etc., which are sent to Paris, and crystallized citrons.

THE BALANCE OF TRADE

The value of the imports and exports of Corsica (in millions of francs) for the years 1932–7 was as follows:

	1932	1933	1934	1935	1936	1937
Imports	32·6	28·9	38·5	36·8	42·2	50·1
Exports	17·9	12·9	13·7	12·1	10·5	17·0
Adverse balance of imports over exports	14·7	16·0	24·8	24·7	31·7	33·1
Adverse balance as a percentage of exports	71	124	181	202	311	194

These figures disclose a striking adverse balance of trade, which increased enormously between 1932 and 1937 owing to the steady increase in the value of imports. Almost one-third of this deficit is offset by the receipt of military pensions, for Corsica contributed substantially to the French armies during the war of 1914–18, and lost more men in proportion to the total population than any other French department (see p. 105). Another important contribution to offset the deficit is made by the salaries of the great number of officials, who are paid from the national exchequer. Other invisible exports include remittances from Corsicans working in France, and the income of Corsicans who have returned from mainland France, South America or other foreign countries to live upon their savings. Although the tourist industry is in the hands of the *Cie Fraissinet* and the *S.N.C.F.* (see p. 138), both external organizations, numerous Corsicans are employed in hotel and other services which cater for it, while the influx of tourists increases the spending power within the island.

BIBLIOGRAPHY

Geographical literature about Corsica is largely confined to small sections within general works on France, to numerous articles scattered among French and Italian geographical periodicals, and to illustrated guide-books and popular descriptive works. The majority of the last category deal with general rather than with particular features; a bibliography is appended of these general sources, while specific works are listed for each separate chapter.

General Sources

(1) French Official and Statistical Sources

(*a*) The most detailed directory of Corsica is *Didot-Bottin, Annuaire du Commerce* (Paris). *Départements Ain-Lozère.* The latest edition is 1939, but earlier editions are useful for comparative figures, etc.

(*b*) *Annuaire Statistique* (Paris). This is produced by the *Direction de la Statistique Générale et de la Documentation.* The latest edition is 1938, but earlier editions are useful for comparative figures, etc.

(2) Encyclopaedias

The fullest general description is in the *Enciclopedia Italiana* (*Istituto della Enciclopedia Italiana*, Milan, 1931). The section on Corsica is pp. 506–24, vol. XI. Although in Italian, and of course coloured by Italian irredentist policy, the article provides a detailed and well-illustrated description of the physical, economic and cultural aspects of the island.

(3) Guide Books

(*a*) Baedeker's *The Riviera, S.E. France and Corsica, the Italian Lakes and Lake of Geneva* (London, latest edition in English, 1931).

(*b*) *La Corse et l'Ile Elbe* (*Guides Bleus Illustrés*), published by the *Librairie Hachette* (Paris, latest edition in French, 1935). This contains the usual detailed description of routes, towns and villages, etc., and in addition a preliminary chapter, *Aperçu Géographique et Historique*, by A. Albitreccia, which is of considerable value.

(*c*) *Sardegna e Corsica. Guida d'Italia del Touring Club Italiano* (Milan, latest edition, in Italian, 1929). This contains a detailed description of the physical, economic and cultural aspects of the island.

(*d*) Cook's *Traveller's Handbook to the Rivieras of France and Italy* (London, 1929), includes a short description of Corsica.

(*e*) *La Corse* (*Collection des Guides Joanne*), by R. Leca (Paris, 1912).

(*f*) *Guida della Strada di Grande Communicazione. Italia Insulare possedimenti e colonie*, published by the *Touring Club Italiano* (Milan, 1931). This contains detailed itineraries, profiles, etc. of the main Corsican roads.

(*g*) *La Corse* (*Guide Pol*), by C. Joublot (Lyons, latest edition, 1932).

(4) Descriptive and Travel Books

Numerous illustrated popular works on Corsica have been published. Some of them provide useful information about scenery, the life of the people, etc., while occasionally they have appendixes of value. The following list includes the more useful of these:

(*a*) A. Albitreccia, *La Corse* (Paris, 1933). A full description of the island from a historical point of view, but with an excellent geographical introduction.

(*b*) R. Ambrosi, *Géographie de la Corse* (Bastia, 1924).

(*c*) R. Ambrosi, *Géographie physique de la Corse* (Grenoble, 1929).

(*d*) D. Archer, *Corsica, the Scented Isle* (London, 1924).
A useful account of the natural vegetation.

(*e*) J. W. Barry, *Studies in Corsica* (London, 1893). Contains a very good account of the natural vegetation and of the Corsican dialect.

(*f*) R. Blanchard, *La Corse* (Grenoble, 1926). A volume of 211 illustrations and descriptive letter-press. It forms one of the series *Les beaux pays*.

(*g*) J. M. Chapman, *Corsica, an island of rest* (London, 1908).

(*h*) P. Colum, *Estates in Corsica* (London, 1932).

(*i*) A. R. Dugmore, *Corsica, the beautiful* (London, 1930). A well-illustrated work, with three chapters on the history, and a useful gazetteer.

(*j*) E. Elsner, *Corsica, far and near* (London, 1929).

(*k*) B. Fortescue, *Napoleon's Heritage* (London, 1924). Contains much detailed information about the Napoleon family, and about the history of the island generally.

(*l*) M. Grosso, *La Corse* (Paris, 1928).

(*m*) R. Juta, *Concerning Corsica* (London, 1926).

(*n*) B. Newman, *Savoy, Corsica, Tunis* (London, 1940). An attractively written and informative work, describing a cycle tour through the island immediately before the outbreak of the present war.

(*o*) J. R. L. Rankin, *A Notebook in Corsica* (London, 1930).

(*p*) G. Renwick, *Romantic Corsica* (London, 1909).

SPECIFIC SOURCES

Numerous articles in French, Italian, English and German periodicals were consulted for specific chapters; the most important are listed below under each chapter heading. Additional material has been obtained from unpublished sources or from the general and statistical works above; the last are repeated in the chapter bibliography only if they have been of especial value.

Chapter II. *General Physical and Geological Description*

(*a*) M. G. Anfossi, 'Volumétrie de la Corse' in *Revue de Géographie Alpine*, vol. VI, pp. 27–69 (Grenoble, 1918). A useful summary of the relief, together with tables of the areas of altitudinal zones, and of the areas of the smaller islands.

(*b*) The fullest and most useful account is by J. Déprat, 'Étude analytique de la Corse' in *Revue de Géographie Annuelle*, vol. II, pp. 1–200 (Paris, 1908).

(*c*) R. Ambrosi, *Géographie physique de la Corse* (Grenoble, 1929).

(*d*) R. Lucerne, 'Les anciens glaciers de la Corse et les oscillations pléistocènes de la Méditerranée' in *Annales de Géographie*, vol. XX, pp. 44–51 (Paris, 1911). A summary and analysis of features produced by the Quaternary Glaciation.

(*e*) A detailed account of the tectonics of Corsica is given by R. Staub, 'Der Deckenbau Korsikas und sein Zusammenhang mit Alpen und Appenin', in the *Vierteljahrsschrift der Naturforschenden Gesellschaft*, pp. 298–348 (Zürich, 1928).

(*f*) The fold mountains of north-east Corsica are described by P. Termier and A. E. Maury, in 'Sur les nappes de la Corse orientale', in *Comptes Rendus de l'Académie des Sciences de Paris*, vol. cxlvi, pp. 1426–8 (Paris, 1908), and 'Nouvelles observations géologiques dans la Corse Orientale', in *Comptes Rendus de l'Académie des Sciences*, vol. clxxxvi, pp. 1247–51 and 1393–7 (Paris, 1928).

(*g*) Numerous scientific and popular descriptions of the mountainous regions of Corsica are contained in mountaineering journals, notably the *Alpine Journal* (London), *Revue de Club Alpin Français* (Paris), *Jahrbuch des schweizer Alpenclubs* (Bern), *Zeitschrift des deutschen und oesterreichischen Alpen-Vereins* (Munich), *Die Alpen* (Bern), and *La Montagne* (Paris).

Chapter III. *Coasts*

(*a*) *Mediterranean Pilot*, vol. ii (London, 1937).

(*b*) *Instructions Nautiques: Mer Méditerranée France* (*Côte Sud et Corse*), *Algérie, Tunisie, Maroc* (*Côte Nord*), No. 360 (1932) *et Fascicule* (1940). Published in Paris by the *Service Hydrographique de la Marine.*

(*c*) *Admiralty List of Lights, etc.*, part V, 'Mediterranean, Black and Red Seas' (London, 1941).

(*d*) P. Castelnau, 'Les Côtes de Corse' in *Revue de Géographie Annuelle*, vol. ix, pp. 1–125 (Paris, 1922).

(*e*) P. Castelnau, 'Sur les traces d'un mouvement positif de long des côtes occidentales de Corse' in *Comptes Rendus de l'Académie des Sciences*, vol. cxlvii, pp. 1442–5 (Paris, 1908).

(*f*) J. Déprat, 'Étude analytique de la Corse' in the *Revue de Géographie Annuelle* vol. ii, pp. 59–103 (Paris, 1908). A detailed regional description of the geology, scenery, etc. of the coasts.

(*g*) M. O. Williams, 'The coasts of Corsica' in *National Geographical Magazine*, vol. xliv, pp. 221–312 (Washington, 1923). A purely descriptive but copiously illustrated survey of the coasts.

Chapter IV. *Climate*

(*a*) *Weather in the Mediterranean*, vol. ii, parts 1–5 (London, 1936). A summary with tables of meteorological data for stations in the western Mediterranean Sea.

(*b*) *Mediterranean Pilot*, vol. ii, pp. 3–22 (London, 1937), contains a general description of the weather in the western Mediterranean area.

(*c*) *Instructions Nautiques: Mer Méditerranée France* (*Côte Sud et Corse*), *Algérie, Tunisie, Maroc* (*Côte Nord*), No. 360 (1932) contains (pp. 3–37) a full description of the weather in the western Mediterranean area, including statistics not available elsewhere.

(*d*) D. Battesti, *Les Climats de la Corse* (Bastia, 1905).

(*e*) E. Bénévent, 'La pluviosité de la Corse' in *Revue de Géographie Alpine*, vol. ii, pp. 239–64 (Grenoble, 1914). Includes a useful sketch-map, a diagram and some rainfall statistics.

(*f*) W. Köppen and R. Geiger (edited by), *Handbuch der Klimatologie*, vol. iii, part E. M. Alt, *Klimakunde von Mittel- und Süd-europa* (Berlin, 1930). This contains general climatic statistics relating to the western Mediterranean area.

Chapter V. *Flora and Fauna*

(*a*) D. Archer, *Corsica, the Scented Isle* (London, 1924), describes the natural vegetation in considerable detail.

(*b*) M. Arrighi, 'Le Pays de Porto et de Sagone', in *Annales de Géographie*, vol. xlii, pp. 500–5 (Paris, 1933). This gives a description of the altitudinal vegetation zones in western Corsica.

(*c*) J. W. Harshberger, 'A Botanist in Corsica' in *Bulletin of the Geographical Society of Philadelphia*, vol. XXVII, pp. 243–55 (Philadelphia, 1929).

(*d*) M. I. Newbigin, *Southern Europe* (London, 1932). A general but useful description of Mediterranean vegetation.

(*e*) R. Richardson, 'Mines and Forests of Corsica' in *Scottish Geographical Magazine*, vol. x, pp. 505–25 (Edinburgh, 1894).

Chapter VI. *Public Health*

(*a*) Statistics of medical personnel, birth- and death-rates, etc. are taken from *Annuaire Statistique* (Paris, latest edition, 1938).

(*b*) Information relating to causes of death is given in *Statistique du mouvement de la population—Nouvelle série, tome* XV, *année* 1935, *2ème parte: les causes de décès* (Paris, 1938).

(*c*) Details of the water supply of each commune are given in *Didot-Bottin, Départements Ain-Lozère* (Paris, latest edition, 1939).

Chapter VII. *Historical Outline*

Concise chronological summaries are contained in the *Encyclopaedia Britannica* (London, especially the 11th edition, 1910) and the *Enciclopedia Italiana* (Milan, 1931). There are numerous historical works in both French and Italian and some in English; the most useful are the following:

(*a*) A. Albitreccia, *Histoire de la Corse* (Paris, 1933).

(*b*) P. Allorge, *Histoire du peuplement de la Corse* (Paris, 1926).

(*c*) R. Ambrosi, *Histoire des Corses et leur Civilisation* (Bastia, 1914).

(*d*) L. H. Caird, *History of Corsica* (London, 1899).

(*e*) C. de Cesari-Rocca and L. Villet, *Histoire de Corse* (Paris, 1916).

(*f*) A. R. Dugmore, *Corsica, the beautiful* (London, 1930). This contains three chapters on the history.

(*g*) B. Fortescue, *Napoleon's Heritage* (London, 1924), which gives much detailed information about the Napoleon family.

(*h*) R. le Joindre, *La Corse et les Corses* (Paris, 1904).

(*i*) M. I. Newbigin, *The Mediterranean lands* (London, 1924). A general survey of the geographical background of the history of the lands round the Mediterranean Sea.

(*j*) V. Pirie, *His Majesty of Corsica* (London, 1939). A biography of the German Baron von Neuhof; it also gives details of the complicated history of Corsica in the middle of the eighteenth century.

Chapter VIII. *The People*

Distribution of population

(*a*) The major statistical sources are the volumes of the *Annuaire Statistique* (Paris) and *Didot-Bottin* (Paris). The latter gives figures for every commune in the island, the former gives general summaries.

(*b*) Detailed figures for 1931 are given in the French census—*Résultats statistiques du recensement général de la population*, published by the *Direction de la Statistique Générale et de la Documentation* (Paris). The complete census is available for 1931, but for 1936 only *Tome* I, 1re *partie*, which gives general tables more readily available in (*a*), has as yet been published.

(*c*) M. G. Anfossi, 'Recherches sur la distribution de la population en Corse' in *Revue de Géographie Alpine*, vol. VI, pp. 72–135 (Grenoble, 1918). A detailed statistical survey of the distribution of population based on the census of 1911. It provides many useful comparative figures.

(*d*) R. Blanchard, 'La distribution de la population en Corse d'après G. Anfossi' in *Annales de Géographie*, vol. XXVII, pp. 376–8 (Paris, 1918). A discussion of Anfossi's work (*c*) above.

Anthropology, Folk-lore, etc.

Much information is scattered throughout the general works listed on p. 182, and in works listed under Chapter VII. The most useful additional sources are:

(*a*) P. Allorge (edited), *Histoire de peuplement de la Corse. Étude biogéographique* (Paris, 1926).

(*b*) L. de Fouchier, 'Un Coin de la Corse—La Colonie grecque de Cargèse' in *A travers le monde*, vol. VIII, pp. 233–6 and 253–4 (Paris, 1902).

(*c*) F. Girolami-Cortona, *Géographie générale de la Corse* (Ajaccio, 1893).

(*d*) D. Jaubert, *Étude médical et anthropologique sur la Corse* (Bastia, 1905).

(*e*) J. B. Marcaggi, *Les chants de la mort et de la vendetta de la Corse* (Paris, 1898).

(*f*) F. Ratzel, 'La Corse: étude anthropogéographique' in *Annales de Géographie*, vol. VIII, pp. 304–29 (Paris, 1899). An old but useful summary of the racial features of the Corsicans, their modes of life, etc.

(*g*) P. Rocca, *Les Corses devant l'anthropologie* (Paris, 1913).

(*h*) O. F. Tencajoli, *La Corsica* (Rome, 1931). A full description of Corsican folk-lore.

(*i*) H. Vanutberghe, 'La Corse: étude de géographie humaine' in *Annales de Géographie*, vol. XIII, pp. 334–47 (Paris, 1904).

Architecture

(*a*) J. B. Marcaggi, *L'île de Corse* (Ajaccio, 1909).

(*b*) P. Mejean, 'Notes sur la Maison Corse' in *Revue de Géographie Alpine*, vol. XX, pp. 655–76 (Grenoble, 1932). A reasoned description of the architectural features of the island, and an account of the modes of life.

Language

(*a*) C. Battisti, 'L'atlante linguistico etnografico della Corsica' in *Universo*, vol. XVIII, pp. 499–506 (Milan, 1937). An analysis of the Corsican dialect.

(*b*) G. Bottiglioni, *Atlante Linguistico etnografico Italiana della Corsica* (Pisa, 1933). This, the most monumental work on the subject, shows the distribution of characteristic phrases in the Corsican dialect by means of 1,400 maps (scale 1:400,000) and explanatory text.

(*c*) D. Carlotti, *Lessicu comparitivu corsu-italo-francese* (Pisa, 1924).

Chapter IX. *Economic Geography*

(*a*) Statistical information relating to agriculture and forestry is contained in the *Statistique Agricole Annuelle* (Paris, latest edition refers to 1938).

(*b*) A. Albitreccia, 'La situation économique de la Corse' in *Bulletin de l'Association des Géographes Français*, No. 68, pp. 65–71 (Paris, 1933).

(*c*) A. Albitreccia, 'Une enquête sur la situation agricole de la Corse' in *Annales de Géographie*, vol. XLVI, pp. 625–8 (Paris, 1937).

(*d*) R. Blanchard, 'Les Genres de vie en Corse' in *Revue de Géographie Alpine*, vol. II, pp. 187–238 (Grenoble, 1914).

(*e*) J. Carlotti, 'La Corse agricole', *Bulletin de la Société départementale d'Encouragement à l'Agriculture* (Paris, 1936). A general survey of the island's agricultural position, intended to be a guide to future development.

(*f*) M. Arrighi, 'Le Pays de Porto et de Sagone', in *Annales de Géographie*, vol. XLII, pp. 500–5 (Paris, 1933). This includes a detailed description of cultivation by irrigation along the coast (pp. 502–4), and of the pastoral industry in the hills ('Vie pastorale', pp. 504–5).

(*g*) The most recent published information about the power resources of Corsica

is contained in *Statistique de la Production et de la Distribution de l'Énergie Électrique en France*. The latest edition refers to 1937 (Paris, 1938).

(*h*) Details of the electricity and gas supply of individual communes are given in *Didot-Bottin, Départements Ain-Lozère* (Paris, latest edition, 1939).

(*i*) Information about the mines of Corsica is scanty. Figures of production are given annually in *Annuaire Statistique*, and an old description of the mineral resources is R. Richardson, 'Mines and Forests of Corsica' in *Scottish Geographical Magazine*, vol. X, pp. 505–25 (Edinburgh, 1894).

(*j*) Statistics and information relating to the Corsican fishing industry are obtained from *Statistique des pêches maritimes* (Paris, annually, latest edition refers to 1937).

Chapter X. *Communications*

(*a*) Detailed information about the roads and railways of Corsica is contained in the various guides listed on p. 181. Special mention must be made of the itineraries and gradient profiles of the main roads contained in the *Guida della Strada di Grande Communicazione: Italia Insulare possedimenti e colonie*, published by the *Touring Club Italiano* (Milan, 1931).

(*b*) Much useful detail about the classification, etc. of roads is supplied by two important road maps: (i) 1:400,000 *Carte Regionale Shell*, Sheet 10 S.E. (Paris, 1936), and (ii) 1:200,000 *Carte Michelin*, Sheet 90 (Clermont-Ferrand, n.d.). The latter is accompanied by a 24 pp. booklet of route itineraries.

(*c*) Details of connections with the mainland by sea and air, and of rail and autocar services within the island, are contained in the *Indicateur Chaix*, the official time-table published at frequent intervals by the *Société Nationale des Chemins de Fer français* (Paris).

(*d*) Statistics of rolling stock, freight, passenger traffic, etc. are given in *Statistique annuaire des Chemins de Fer français* (Paris, latest edition refers to 1936).

(*e*) Information about the telegraphic communications of Corsica are contained in *Nomenclature des câbles formant le réseau sous-marin du globe*, published by the *Bureau de l'Union internationale des télécommunications* (Berne, latest edition, 1939).

(*f*) Information about radio-telephonic communications is contained in *Nomenclature des Stations Fixes*, published as for (*e*).

(*g*) Information relating to aero-radio stations is contained in *Nomenclature des Stations Aéronautiques et d'Aéronef*, published as for (*e*).

Chapter XI. *Ports and Commerce*

Apart from charts published by the British Admiralty (London) and the *Service Hydrographique de la Marine* (Paris), details of which are appended in the Map Appendix (p. 191) and in the underlines to the port plans (Figs. 56–62), the chief sources are as follows:

(*a*) *Mediterranean Pilot*, vol. II (London, 1937) and *Supplement* No. 4 (1942). This gives descriptions of port facilities, anchorages, etc.

(*b*) *Instructions Nautiques: Mer Méditerranée France* (*Côte Sud et Corse*), *Algérie, Tunisie, Maroc* (*Côte Nord*) (Paris, 1932, with *Fascicule*, 1940). Published in Paris by the *Service Hydrographique de la Marine*. This supplements information contained in (*a*).

(*c*) A. Albitreccia, 'Ajaccio: Étude de géographie humaine', in *Annales de Géographie*, vol. XLVII, pp. 361–72 (Paris, 1938). This contains a description of the growth of the port of Ajaccio.

(*d*) Statistics of shipping and commerce are given in (i) *Tableau Générale de la Navigation Maritime* (Paris, annually), (ii) *Tableau Générale du Commerce Extérieur* (Paris, annually), and (iii) *Didot-Bottin, Départements Ain-Lozère* (Paris, latest edition, 1939).

Appendix I

MAPS OF CORSICA

A. OFFICIAL TOPOGRAPHICAL MAPS

The department responsible for the production of official maps of Corsica, as of mainland France, is the *Service Géographique de l'Armée*, formerly part of the *Dépôt de la Guerre*.

The first French triangulation was carried out between 1818–45. It was started between the latitude of Dunkirk and of the Spanish frontier, and was amplified to form a grid over the country. Corsica was not linked directly to the mainland survey, but by a series of triangles extending into Italy round the Ligurian Sea, via Leghorn (Livorno) and the Tuscan Archipelago. A new triangulation has been in course of execution since the war of 1914–18. Corsica was linked to the mainland survey by a special triangulation carried out by M. Helbronner, who had been responsible for surveys in the Alps along the Italian frontier. Long 'arms' to the triangles were produced between trigonometrical stations on the mainland (at Mt Agel and Mt Gros, near Nice, and at La Sauvette and Coudon near Hyères) and in Corsica (at Mt Cinto and at Mt Stello in Cap Corse). The fixing of the last two points gave a calculated base between them of nearly 60 km.

Levelling was carried out by the *Service du Nivellement Général de la France*, a department of the *Service Géographique de l'Armée*; heights of bench marks and of level lines are published in a series of volumes. A primary level was run round the Corsican coast, based on data derived from tidal-gauges at Bastia, Ajaccio and Bonifacio. A secondary level was run through the centre of the island from Porto-Vecchio to Ile-Rousse; from it, four levels were run along valleys to the east and west to join up the coastal primary triangulation. Another secondary level was run round and across the Cap Corse peninsula.

One of the major problems of the various Corsican series was the portrayal of relief. Owing to the extremely complicated terrain, the only map of Corsica to show contours is the small scale inset to Sheet 6 of the *Atlas de France* (see p. 191); even on that the contours are necessarily extremely generalized. The usual methods include various combinations of form-lines, hill-shading in grey or brown, fine black cliff-drawing, and heavy black hachures. Some of the sheets of the central part of the island have minor inaccuracies.

The first series to be produced was the 1 : 80,000 *Carte d'État Major*, published 1869–79. It was followed in 1884 by Sheet 33 (Corse) of the 1 : 320,000, with a second edition two years later; both were unattractively and heavily printed in black. Between 1892 and 1911 sixteen sheets of the 1 : 100,000 series in colours were published; the final sheet of part of the interior did not appear until 1934. The Corsican sheets of the 1 : 200,000 *Carte de France* did not appear until 1930, although the mainland sheets had been completed before the war of 1914–18. Finally, the *Ajaccio* sheet of the 1 : 500,000 *Carte de France et des Pays Limitrophes* (the source of the G.S.G.S. map contained at the back of this volume) was published in 1934. Sheet numbers and/or names of the 1 : 80,000, the 1 : 100,000 and the 1 : 200,000 series are shown on Fig. 64.

The largest available scale of the Corsican series is thus the old 1 : 80,000, although the most useful for general purposes is the coloured 1 : 200,000. It is intended to produce in due course a complete series of the 1 : 20,000 *Plans Directeurs* (of the intended total of 26, only small portions of four sheets have been produced), and of the attractive 1 : 50,000 *Nouvelle Carte de France* in colours. The latter has not yet been started for Corsica, and as only a small number of the mainland sheets had been produced by 1939, it is improbable that the Corsican sheets will appear for a considerable time.

The official series which have been published are listed below. They are described only where they reveal differences from the mainland sheets; full details of the series as a whole are given in the Appendix, Handbook on France, vol. 1.

(1) 1 : 20,000. *Plans Directeurs*

Only small portions of four southern sheets have been produced out of an intended total of 26. No 1 : 10,000 sheets are intended.

(2) 1 : 80,000. *Carte d'État Major*

Nine sheets in black, 73 × 54 cm., published 1869–79.

(3) 1 : 100,000. *Carte de la France*

Seventeen sheets in colours, each 28 × 38 cm., published between 1892 and 1911, except for sheet 40 XXX, which was published in 1934. All sheets are similar to the mainland series, except for sheet 40 XXX, which has hill-shading in light purple-brown instead of grey. The whole series shows the complicated relief very clearly by means of hill-shading and fine black cliff-drawing. There are a few minor inaccuracies of detail in the heart of the mountainous district of Mt Cinto (Sheet 39 XXX).

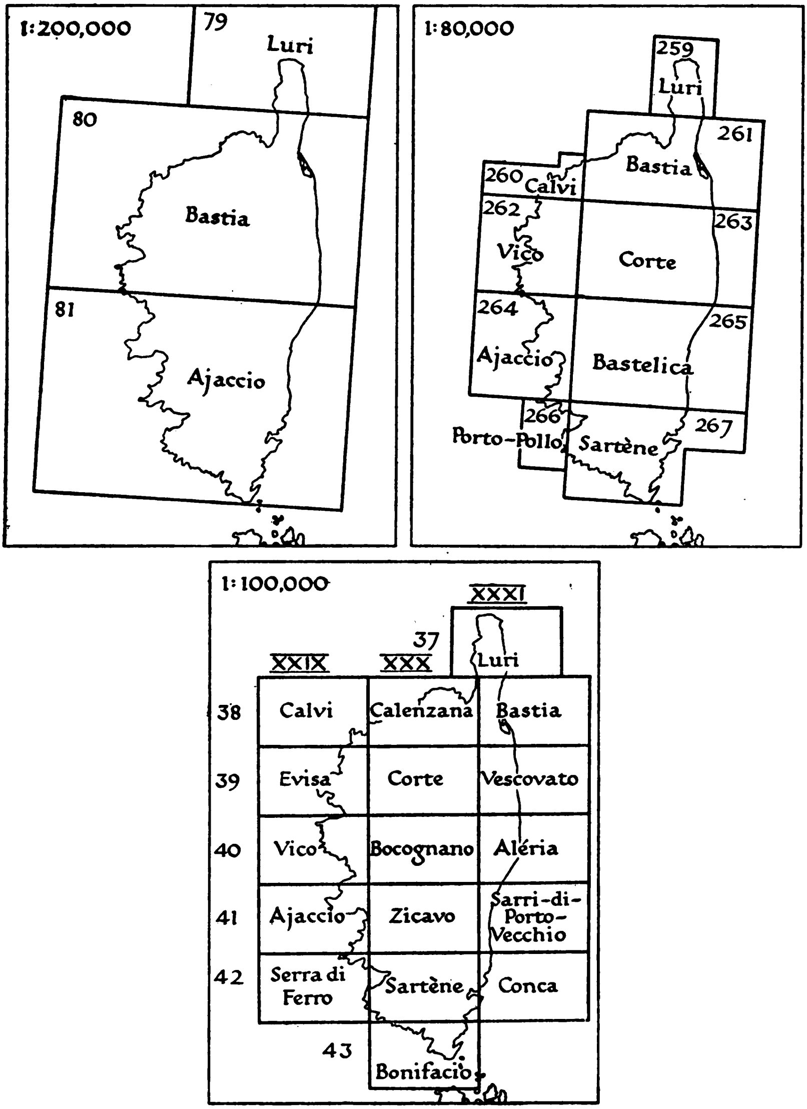


Fig. 64. Index maps to the 1:80,000, 1:100,000, and 1:200,000 official topographical sheets of Corsica

(4) 1 : 200,000. *Carte de la France*

Three sheets, published 1930. Two sheets, one 66 × 42 cm., the other 36 × 42 cm. Relief is shown by light brown form-lines on which is superimposed brown hill-shading, with spot-heights in black. There are no surveyed contours (as shown on the mainland sheets by heavier brown lines), except on the small portion of Cap Corse shown on sheet 79.

(5) 1 : 200,000. *Type Tourisme, La Corse*

The whole island on a single sheet, 92 × 56 cm. Sheet F of series (n.d.).

(6) 1 : 200,000. *Carte de la France*

Produced by *Le Service des Cartes et Plans du Ministère des Travaux Publics* (n.d.). Six sheets, numbers 136–141, 22·5 × 42·5 cm., printed in three colours.

(7) 1 : 320,000. Sheet no. 33. *Corse*

Published in two editions, 1884 and 1886, each sheet 50 × 70 cm., both in black. No relief is shown on the edition of 1884. Relief is shown on the edition of 1886 by heavy black hachuring and hill-shading; this is an unpleasant looking map and is very difficult to read.

(8) 1 : 500,000. *Carte de France et des Pays Limitrophes. Ajaccio*

A single sheet 45 × 38 cm., NK 32 of whole series. Published 1934.

Relief shown clearly by grey hill-shading, with spot-heights in black. Submarine contours in blue at 20, 50, 100, 200, 500, 1,000 and 2,000 m.

Note. The lighthouse on the extreme north of the Cap Corse is shown on this sheet as being situated on the mainland; it is actually on the Ile de la Giraglia.

(9) 1 : 1,000,000. *Carte du France*

Corsica is inset on the *Feuille Ouest* of a two sheet edition (1934). Size of inset 12·5 × 22 cm. In four colours.

(10) 1 : 1,000,000. *Carte Internationale du Monde au millionème. Firenze*

Size of sheet 51 × 44 cm., numbered North K 32. Published 1926. Corsica occurs in the centre of the sheet. Parts of the French and Italian Rivieras, the Tuscan coast and northern Sardinia are shown.

B. MAPS PRODUCED BY THE GEOGRAPHICAL SECTION OF THE BRITISH GENERAL STAFF

(1) 1 : 500,000. G.S.G.S. no. 4240. *Corsica*

Edition of A (8) with legend, etc. in English and revised to 1941. Photolithographed by the War Office. Details as for A (8), with grid at 10 km. intervals superimposed in blue. The extreme north of Corsica is within a second grid in brown with a different point of origin.

Note. The lighthouse on the extreme north of the Cap Corse is shown on this sheet as being situated on the mainland; it is actually on the Ile de la Giraglia.

This map is folded in the pocket at the end of this volume.

(2) 1 : 1,000,000. G.S.G.S. no. 2758. *Firenze*

Edition with legend, etc. in English of A (10). Compiled at the Royal Geographical Society, drawn and heliographed at the Ordnance Survey Office, 1916. Third edition printed and published at the War Office, 1940.

C. ADMIRALTY CHARTS

An index of the charts on which Corsica is shown appears in the *Mediterranean Pilot*, vol. 1 (1937).

An index map of charts of Corsica published by the *Service Hydrographique de la Marine* appears in *Instructions Nautiques: Mer Méditerranée France* (*Côte Sud et Corse*), *Algérie*, *Tunisie*, *Maroc* (*Côte Nord.*), No. 360 (Paris, 1932, *et Fascicule* 1940).

The French charts are also listed in *Catalogue des Cartes, Plans et Ouvrages qui composent L'Hydrographie Française* (Paris, 1939).

D. GEOLOGICAL MAPS

(1) 1 : 80,000. *Carte Géologique détaillée*

Superimposed on the *Carte Topographique de l'État-Major*. Nine sheets, 73 × 54 cm., named and numbered as topographical series A (2). Published 1873–9, revised 1901.

(2) 1 : 500,000. *Carte Géologique de France*

Superimposed in colours on the *Carte du dépôt des Fortifications*. Two quarter sheets, XII SE and XV NE. The former is an inset 14 × 24 cm. on the Nice sheet, and shows the northern third of the island. The latter is 23 × 29 cm. No date of publication given.

(3) 1 : 1,000,000

Inset to single sheet wall-map of France in colours, published 1905. Size of inset 10·5 × 19 cm.

E. MISCELLANEOUS SOURCES

(1) *Atlas de France*

Produced by the *Comité National de Géographie*. On the majority of sheets Corsica appears as a small inset of little value. The following larger insets (10 × 16 cm.) are useful:

(*a*) Sheet no. 6. Relief du Sol, *Feuille S.E.* 1 : 1,250,000. A relief map, layered in colours, and the only map of Corsica with contours.

(*b*) Sheet no. 24. *Mers et Côtes.*

(*c*) Sheet no. 75. *Densité de la Population en* 1931. *Feuille S.E.*

(2) *Atlante Linguistico etnografico Italiana della Corsica*

Seven volumes, 59 × 45 cm., published in Pisa, 1933. This monumental work, produced by Professor Gino Bottiglioni, contains 1,400 maps of Corsica, each 48 × 40 cm., on a scale of 1 : 400,000. It shows in immense detail the distribution of phrases in the Corsican dialect.

(3) 1 : 200,000. *Carte Michelin*

Produced by *Michelin et Cie* (Clermont-Ferrand, n.d.). A single sheet, number 90, 107×46 cm., with an accompanying 24 pp. booklet of itineraries, and two inset maps of (1) itineraries described in the text and (2) auto-car routes. Ungridded.

Relief shown by spot-heights only. Woods in green. Roads and tourist information given in detail.

(4) 1 : 400,000. *Carte Regionale Shell*

Sheet 10 (*Sud-Est*), published in Paris, 1936, with an inset of Corsica 28 × 14 cm. In colours.

(5) 1 : 625,000. *Carte de Production, Transport et Distribution de l'Énergie Électrique*

Edited and published by the *Société financière électrique* (Paris, 9th edition, 1937). Corsica is shown as an inset on sheet 4, 18×30 cm., in colour.

(6) *Guide-book, maps and plans*

Numerous maps and plans on various scales appear in several guide-books. The most useful of these guide-books are listed in the Bibliography on p. 181.

Appendix II

TABLE OF ADMINISTRATIVE DIVISIONS

No. on Fig. 1	Canton	No. of communes	Population 1936
	I. Arrondissement of Ajaccio		
53	Ajaccio	6	40,309
44	Bastelica	5	7,204
45	Bocognano	5	4,439
48	Evisa	6	3,239
49	Piana	3	2,707
46	Salice	5	3,118
54	Sta Maria et Siché	17	9,236
51	Sari d'Orcino	8	2,631
52	Sarrola-Carcopino	5	3,305
47	Soccia	4	2,588
50	Vico	7	4,775
43	Zicavo	9	7,948
Total	12	80	91,499
	II. Arrondissement of Bastia		
7	Bastia-Terranova	2	52,643
8	Bastia-Terravecchia	1	
11	Belgodère	6	2,268
19	Borgo	4	2,210
3	Brando	3	2,248
15	Calenzana	8	5,917
14	Calvi	2	3,418
21	Campile	7	3,589
20	Campitello	6	2,440
26	Cervione	4	2,398
12	Ile-Rousse	6	5,013
17	Lama	3	1,258
2	Luri	5	3,918
18	Murato	4	2,100
13	Muro	9	3,121
4	Nonza	5	2,094
9	Oletta	4	2,405
16	Olmi-Capella	4	1,338
24	Pero-Casevecchie	5	2,148
23	Porta	15	4,421
1	Rogliano	5	3,059
6	St Florent	4	2,516
5	Sta Maria di Lota	3	2,366
25	San Nicolao	5	2,093
10	Santo Pietro di Tenda	3	1,826
22	Vescovato	7	5,586
Total	26	129	122,393
	III. Arrondissement of Corte		
35	Corte	1	6,014
34	Calacuccia	5	5,157
33	Castifao	3	1,635
41	Ghisoni	4	4,115
39	Moïta	8	4,207
30	Morosaglia	7	3,708
32	Omessa	7	1,747
38	Piédicorte di Gaggio	7	3,358
29	Piedicroce	15	3,147
27	Pietra di Verde	6	2,914
42	Prunelli-di-Fium' Orbo	5	5,347
31	St Laurent	7	2,186
36	Sermano	10	2,609
28	Valle d'Alesani	9	2,806
37	Venaco	7	3,795
40	Vezzani	7	2,932
Total	16	108	55,637
	IV. Arrondissement of Sartène		
62	Bonifacio	1	3,628
58	Levie	5	8,910
60	Olmeto	6	5,955
55	Petreto-Bicchisano	6	5,312
57	Porto-Vecchio	4	7,488
59	Sta Lucia di Tallano	9	4,601
61	Sartène	8	8,790
56	Serra di Scopamène	8	8,379
Total	8	47	53,325

Source: *Didot-Bottin, Départements Ain-Lozère* (Paris, 1939).

Appendix III

TABLE OF COMMUNES WITH TOTAL POPULATION OVER 1,000 IN 1936

Note. (i) A figure preceding the name of a commune which had an agglomerated population of over 1,000 refers to Fig. 34. (–) signifies that the commune does not appear on the map, as its agglomerated population was less than 1,000. (ii) The grid reference is to the map in the folder at the back of the volume. (iii) The letters A, B, C and S indicate that the commune is situated in the arrondissement of Ajaccio, Bastia, Corte and Sartène respectively. (iv) The height of a commune is given as the height of the nucleated centre of that commune.

Commune	Arr.	Grid Ref.	Metres above sea level	Population	
				Agglomerated	Total
22 Ajaccio	A	QH 6381	38	33,060	37,146
(–) Albertacce	C	QC 8726	867	551	1,184
28 Aullène	S	QH 9263	850	2,017	2,113
20 Bastelica	A	QH 9088	808	4,030	4,152
2 Bastia	B	QD 2764	Sea level	42,551	52,208
18 Bocognano	A	QH 9197	700	1,249	1,709
37 Bonifacio	S	QH 9619	70	2,499	3,628
(–) Brando	B	QD 2873	300	818	1,461
(–) Calacuccia	C	QC 8926	847	518	1,158
7 Calenzana	B	QC 7746	250	2,935	3,063
6 Calvi	B	QC 7053	81	2,612	2,824
(–) Campile	B	QC 1942	567	403	1,030
(–) Cauro	A	QH 7879	370	817	1,057
10 Cervione	B	QD 2824	380	1,288	1,560
34 Conca	S	QJ 1258	250	1,190	1,254
11 Corte	C	QD 0122	486	5,042	6,014
24 Cozzano	A	QH 9881	700	1,174	1,174
21 Cuttoli-Corticchiato	A	QH 7487	700	1,140	1,270
(–) Figari	S	QH 9030	125	726	1,690
(–) Ghisonaccia	C	QJ 1988	21	672	1,191
17 Ghisoni	C	QJ 0499	650	1,063	1,618
13 Guagno	A	QC 7808	750	1,116	1,116
5 Ile-Rousse	B	QC 8459	Sea level	2,226	2,226
(–) Isolaccio	C	QJ 0988	740	193	1,347
30 Levie	S	QH 9555	656	2,696	3,441
(–) Lozzi	C	QC 8827	1,044	377	1,185
(–) Luri	B	QD 2586	112	501	1,504
36 Monacia d'Aullène	S	QH 8435	120	1,015	1,270
9 Morosaglia	C	QD 1436	860	1,091	1,091
4 Oletta	B	QC 1958	250	1,001	1,060
(–) Olmeto	S	QH 7857	360	524	1,947
23 Palneca	A	QH 0084	900	1,739	1,759
16 Pastricciola	A	QC 8604	600	1,304	1,304
27 Petreto-Bicchisano	S	QH 8365	550	1,297	1,605
14 Piana	A	QC 5717	450	1,157	1,157
35 Porto-Vecchio	S	QJ 0742	Sea level	2,755	5,304
32 Propriano	S	QH 7653	12	1,890	2,011
(–) Prunelli-di-Fium' Orbo	C	QJ 1388	580	470	1,329
1 Rogliano	B	QD 2693	220	1,030	1,030

3	St Florent	B	QD 1663	Sea level	1,006	1,083
(–)	San Gavino di Carbini	S	QD 1255	697	565	1,406
31	Sta Lucia di Tallano	S	QH 8958	450	1,575	2,258
26	Sta Maria et Siché	A	QH 8375	500	1,155	1,155
(–)	Santo Pietro di Tenda	B	QD 1155	360	717	1,026
(–)	Sta Reparata di Balagna	B	QC 8457	150	650	1,172
33	Sartène	S	QH 3247	305	4,307	6,174
29	Serra di Scopamène	S	QH 9361	865	1,094	1,100
(–)	Solaro	C	QJ 1376	497	599	1,089
(–)	Sollacaro	S	QH 7760	450	864	1,056
19	Ucciani	A	QH 8494	450	1,013	1,112
12	Venaco	C	QD 0213	610	1,626	1,626
(–)	Venzolasca	B	QD 2640	350	882	1,107
8	Vescovato	B	QD 2542	140	1,291	1,510
(–)	Vezzani	C	QD 0707	800	889	1,023
15	Vico	A	QC 7108	400	1,039	1,618
25	Zicavo	A	QH 9778	727	1,493	1,529
(–)	Zonza	S	QH 6090	800	749	1,814

Source: *Didot-Bottin, Départements Ain-Lozère* (Paris, 1939).

Appendix IV
ANCHORAGES

No.	Anchorage	Shelter	Distance and direction offshore	Depth at anchorage	Nature of bottom	Landing facilities	Communication inland
(i)	Port of Bastia (42° 42′ N, 9° 27′ E) (Plates 54, 71–4)	See pp. 160–2, Fig. 56					Main roads N and S along coast, and W to St Florent, Ile-Rousse, etc. Railway to Ajaccio and to Porto-Vecchio
(ii)	Baie de Macinaggio (42° 57′ N, 9° 27′ E) (Plate 15)	No shelter from easterly winds, which cause heavy swell with little warning. North of line E of SE jetty is exposed to W squalls down valley of Rogliano	2¾ cables (509 m.) E of SE jetty	3¾–5 fm. (6·9–9·1 m.)	Sand and weed. South of line E of SE jetty has poor holding ground	Two small jetties at southern end of bay. Port is accessible in southern part only to vessels drawing 8 ft. (2·4 m.)	Main road inland from port to Rogliano and Centuri. Main road S to Bastia along coast. Mule-tracks N and NE
(iii)	Baie de Tamarone (42° 58′ N, 9° 27′ E)	No shelter from E winds. Better shelter from W winds than (ii)	Within bay, 1 cable (185 m.) approx. SSE of Sommet de Tamarone	6 fm. (11·0 m.)	Rock and sand	No facilities. S side of bay is steep	Tracks only S to Macinaggio, NW to Rogliano and N to Tour Ste Marie
(iv)	Rade de Ste Marie (43° 0′ N, 9° 28′ E)	Moderately good. Shelter from W winds, poor elsewhere	4½ cables (833 m.) N of chapel of Ste Marie	5½–6½ fm. (10·1–11·9 m.)	Sand, shells and weed	No facilities	Mule-tracks along the coast
(v)	Baie de Centuri (42° 58′ N, 9° 21′ E)	Moderately good shelter from E winds; very exposed to W winds	3½ cables (648 m.) N of Ile de Centuri	8–10 fm. (14·8–18·3 m.)	Rock, shells and weed; holding ground poor	Small fishing harbour (Port de Centuri) within bay, accessible to boats drawing less than 7 ft. (2·1 m.). Rest of coast rocky and bordered by rocks for 1 cable (185 m.) offshore	Minor road from Port de Centuri runs E and SE to join main coast road at Casevecchia and at Pruno

(vi)	St Florent (42° 41′ N, 9° 17′ E) (Plates 20, 75)	Shelter good from all but N winds	4 cables (740 m.) W of town	3½–3¾ fm. (6·4–6·8 m.)	Mud and sand	Landing by small boat only (see also p. 163, Fig. 57)	Main roads to E to Bastia, SE to Oletta and to Ile-Rousse
(vii)	Rade de Fornali (42° 41′ N, 9° 17′ E)	Shelter good from all but N winds	6 cables (555 m.) SE of light-tower on Pte de Fornali	6½–7 fm. (11·9–12·8 m.)	Sand and weed	Small landing place near light-tower	Track from light-tower to St Florent
(viii)	Mouillage de Mortella (42° 42′ N, 9° 16′ E)	Shelter good from all but N winds	6 cables (1,111 m.) SE of light on Pte Mortella	14–15 fm. (25·6–27·4 m.)	Sand	No facilities. Rocky coast	Track to St Florent
(ix)	Port of Ile-Rousse (42° 38′ N, 8° 56′ E) (Plate 77)	See pp. 163, 165, Fig. 58					Main roads E and W along coast, SE to Belgodère and Ponte-Leccia, S to Muro and SW to Calenzana. Railway W to Calvi, SE to Ponte-Leccia and Bastia
(x)	Port of Calvi (42° 35′ N, 8° 46′ E) (Plates 22–3, 45, 76)	See pp. 166, 167, Fig. 59					Main roads E and SW along coast. Terminus of railway to Bastia
(xi)	Golfe de Galéria (42° 25′ N, 8° 39′ E)	Good only in fine weather. Westerly swell makes anchorage untenable	3½ cables (648 m.) NW of Tour de Galéria	7–13 fm. (12·8–23·8 m.)	Rock and gravel	No facilities. Broad sandy beach at head of gulf	Track from village runs E for 4 km. and joins main coast road
(xii)	Golfe de Porto (42° 16′ N, 8° 42′ N) (Plates 24–6)	Good only in fine weather	At head of gulf	6½ fm. + (11·9 m. +)	Sand and gravel	Wharf for fishing boats and small cargo vessels	Main coast road skirts village. Minor road inland to Evisa

Appendix IV (*cont.*)

No.	Anchorage	Shelter	Distance and direction offshore	Depth at anchorage	Nature of bottom	Landing facilities	Communication inland
(xiii)	Golfe de Girolata (42° 21′ N, 8° 38′ E)	Good only in fine weather	½ cable (93 m.) S of Tour de Girolata	6½–9 fm. (11·9–16·5 m.)	Rock, some coral	No facilities	Mule tracks only, one S to coast road near Osani, another NNE to Galéria
(xiv)	Baie de Sagone (42° 6′ N, 8° 43′ E) (Plate 28)	Good shelter from E winds. Fair protection from W by Pte de la Batterie, but poor shelter from SW	1½ cable (278 m.) W of Tour de Sagone. Small craft can anchor up to ½ cable (93 m.) of shore	6½–7 fm. (11·9–12·8 m.)	Sand and weed	Landing stage 34 yd. (31 m.) and 9 yd. (8 m.) broad with depths of 16 ft. (4·9 m.) alongside on NW side of bay under construction. Small landing stage for fishing boats on E side of bay, S of Sagone village	Main road parallels coast closely and passes through village of Sagone. Main road runs NE up Sagone valley to Evisa
(xv)	Golfe de la Liscia (42° 4′ N, 8° 45′ E)	Good shelter from E and partial shelter from W winds, but poor shelter from SW	½ cable (93 m.) from NE shore of gulf	4¼–8 fm. (7·7–14·8 m.)	Rocks	No facilities. Landing difficult as coast is rocky	Main road parallels coast closely above rocky margins
(xvi)	Golfe de Lava (41° 59′ N, 8° 40′ E)	Good shelter from E and partially sheltered by Pte Pelusella from W winds, but poor shelter from SW	½ cable (93 m.) from E shore of gulf	3¾–9 fm. (6·8–16·5 m.)	Sand and rocks	No facilities. Shelving sandy beach	Access to interior or along coast by mule tracks only
(xvii)	Port of Ajaccio (41° 55′ N, 8° 45′ N) (Plates 31, 80–3)	See pp. 166–71, Fig. 60					Main roads SE to Cauro and Sartène, NE to Corte, N to Sagone and Calvi. Railway to Corte and Bastia

(xviii)	Port of Propriano (41° 41′ N, 8° 50′ E) (Plate 84)	See pp. 171–2, Fig. 61					Main roads N to Ajaccio, S to Sartène and Bonifacio. Minor roads E to Arbellara and SW to Belvedère-Campo Moro
(xix)	Mouillage de Porto Pollo (41° 43′ N, 8° 48′ E)	Sheltered by Pte de Porto Pollo from W winds. Open to SW	2 cables (370 m.) E of Tour de Porto Pollo	11 fm. (20·1 m.)	Weed	No facilities. Shelving sandy beach NW of anchorage	Minor road runs inland NE up Taravo valley to Petreto-Bicchisano
(xx)	Mouillage de Campo Moro (41° 38′ N, 8° 49′ E)	Well sheltered from all directions but N	3 cables (555 m.) from beach at head of bay	7–13 fm. (12·8–23·8 m.)	Weed	No facilities. Shelving sandy beach at head of bay to S	Minor road runs E to Belvedère, thence NE to Propriano and E to Sartène
(xxi)	Golfe de Figari (41° 28′ N, 9° 5′ E)	Well sheltered from NW and NE winds, but very exposed to SW	1½ cables (278 m.) ESE of Tour de Figari. Local knowledge necessary	9 fm. (16·5 m.)	Weed and sand; holding ground good	No facilities. Shores of bay steep and rocky. At head of bay is small sheltered basin near Ilot du Port, which can accommodate small coasting vessels	Main road between Bonifacio and Sartène crosses head of gulf

Appendix IV (*cont.*)

No.	Anchorage	Shelter	Distance and direction offshore	Depth at anchorage	Nature of bottom	Landing facilities	Communication inland
(xxii)	Port of Bonifacio (41° 22′ N, 9° 10′ E) (Plates 33, 85–6)	See pp. 171, 173–4, Fig. 62					Main roads run NW to Sartène and Ajaccio, and NNE to Porto-Vecchio and Bastia. Minor road to Cap Pertusato lighthouse
(xxiii)	Golfe de Sta Manza (41° 25′ N, 9° 15′ E)	Good shelter from all but E winds. Small vessels can proceed farther up gulf, where sheltered from all but NE winds	7 cables (1,296 m.) SSE of Cap Blanc and 2 cables (370 m). offshore	8–12 fm. (14·8–21·9 m.)	Sand and weed; holding ground good	No facilities, but sandy beach at head of gulf	Minor road runs WSW to Bonifacio from head of Golfe de Sta Manza
(xxiv)	Mouillage de Columbara (41° 32′ N, 9° 22′ E)	Sheltered from W and E, but exposed to NE winds	Between Pte Cerbicale and Iles Cerbicales	10–13 fm. (18·2–23·8 m.)	Gravel and sand; holding ground good	No facilities, but sandy beach south of Pte Cerbicale	Rough mule track leads N to Picoaggia, hence W to Porto-Vecchio
(xxv)	Golfe and Port de Porto-Vecchio (41° 36′ N, 9° 17′ E) (Plate 36)	See pp. 174–6, Fig. 63					Main coast roads run N to Solenzara and Bastia, S to Bonifacio. Minor road runs NW to Latarriccio. Mule tracks run inland to villages. Terminus of railway from Bastia

(xxvi)	Golfe de St Cyprien (41° 37′ N, 9° 22′ E)	Sheltered from winds between W and NE, but very exposed to SE winds	4 cables (740 m.) W of Ilot St Cyprien	2¾–3¾ fm. (4·9–6·8 m.)	Sand and weed; holding ground poor	No facilities. Landing difficult as sides of gulf are bordered by bank 3½ cables (648 m.) offshore with numerous sunken and exposed rocks. Beach consists of sand banks backed by mud flats and *étangs*	Mule tracks run inland to main coast road
(xxvii)	Golfe de Pinarello (41° 41′ N, 9° 23′ E)	Good shelter from W winds for small craft; exposed to E winds	6 cables (1,111 m.) W of Pinarello	6½–8 fm. (11·9–14·6 m.)	Sand and mud; holding ground poor	No facilities. Sandy beach on W side of gulf, but numerous sunken and exposed rocks extend in places for 3 cables (555 m.) offshore	Minor road runs NW to coast road at Ste Lucie
(xxviii)	Estuary of river Solenzara (41° 52′ N 9° 25′ E)	Anchorage for small vessels only in fine weather. Exposed to E winds	Anchorage close to N bank of estuary	2–3 fm. (3·7–5·5 m.)	Sand and mud	No facilities	Main coast road runs through village. Minor road runs SE over Col de Bavella to Zonza
(xxix)	Mouillage de Pte d'Arco	Anchorage only in fine weather. Exposed to all winds, especially E	20 cables (3·7 km.) N of Pte d'Arco	11 fm. (20·1 m.)	Weed, sand and mud; holding ground good	No facilities. Shallow water, with shelving sandy beach, behind which is large *étang*	Access inland extremely difficult, with mud flats and lagoons; main road 8 km. inland, to which tracks lead inland from Tour d'Arco

Appendix V

WEST-EAST ROUTES ACROSS CORSICA

(R.N. = *route nationale*. C.V. = *Chemin vicinal*.)

Valleys from	To	Name of col.	Height of col. metres	Type of route	Character
Regino	Navaccia	Col de St Columbane	682	R.N.	Practicable for cars
Ficarella	Tartagine	Col de Tartagine	1,857	Rocky path	Footpath
Ficarella	Asco	Col de Petrella	1,963	Rocky path	Footpath
Ficarella	Asco	Col d'Avartoli	1,900	Track	Mule track (laborious)
Fango	Asco	Col de Taïta	2,008	Rocky path	Footpath
Fango	Niolo	Col de Tula	2,000	Rocky path	Footpath (very difficult)
Lonca	Niolo	Col de Guagnerola	1,837	Rocky path	Footpath (very difficult)
Sitone	Niolo	Col de Vergio	1,464	C.V.	Practicable for cars
Porto	Niolo	Col de St Pierre	1,446	Track	Mule track
Liamone	Tavignano	Col de Ciarnente	1,571	Track	Mule track
Liamone	Manganello	Col de Manganello	1,792	Track	Mule track
Cruzzini	Manganello	Col d'Oreccia	1,453	Rocky path	Mule track (difficult)
Gravone	Vecchio	Col de Vizzavone	1,162	R.N.	Practicable for cars
Prunelli	Fium' Orbo	Col d'Astra	1,760	Track	Mule track
Taravo	Fium' Orbo	Col de Verde	1,345	R.N.	Practicable for cars
Taravo	Travo	Col de Bianca	1,535	Track	Mule track (difficult)
Rizzanèse	Travo	Col d'Asinao	1,632	Track	Mule track (easy)
Fiumicicolli	Solenzara	Col de Bavella	1,211	C.V.	Practicable for cars
Rizzanèse	Cavo	Col de Castelluccio	1,383	Track	Mule track
San Giovanni	Stabiacco	Unnamed	114	C.V.	Practicable for cars

Source: Sheets of the 1:100,000 *Carte de la France*, 1892–1934, and 1:200,000 *Carte Michelin*, Sheet 90, with accompanying booklet of itineraries (Clermont-Ferrand n.d.).

Appendix VI

ROUTE ITINERARIES

For each route a list is given of town and villages, cols and summit levels, important bridges and points where roads branch (br.) left (L.) or right (R.).

The distance is given in both kilometres and miles from the commencement of the route, and the height of the point in metres is stated; in the case of towns and large villages details of available public facilities are added, comprising railway stations (St.), telegraph offices (O.) and telephones (T.).

Route I. *Ajaccio to Bonifacio, via Cauro and Sartène* (p. 145)

Km.	Miles	Point on route	m.
0·0	0·0	Ajaccio (St., O., T.) (Place du Diamant)	38
2·8	1·7	br. L. to Mezzavia for Corte (N. 193, Route V) and for Porto (N. 199, Route IV)	20
4·1	2·5	Col d'Aspreto	41
7·2	4·5	Bridge over R. Gravone (north branch)	10
8·4	5·2	Bridge over R. Gravone (south branch)	10
8·8	5·5	br. R. to Ocana	40
11·4	7·1	Pisciatello. Bridge over R. Prunelli: br. R. to Port de Chiavari	30
11·8	7·3	br. R. to Pila-Canale	38
18·2	11·3	Baracone: br. L. to Eccica	260
20·5	12·7	Cauro (St., O., T.)	350
28·2	17·5	Col de San Georgio	762
29·7	18·4	br. R. to Albitreccia	670
32·3	20·0	br. L. to Sta Maria Siché and Guitera	550
34·2	21·2	Grosseto (O., T.)	441
36·6	22·7	br. R. to Urbalacone	200
39·5	24·5	br. L. to Zigliara	200
41·1	25·6	Bains de Taccana	200
42·8	26·6	Pont d'Abra over R. Taravo	170
47·8	29·7	br. L. to Moca and Arguista	410
47·9	29·8	br. R. to Porto Pollo	410
48·6	30·2	Bicchisano	412
48·9	30·4	br. L. to Petreto	412
57·4	35·6	Casalabriva (O.)	595
59·0	36·6	Col de Celaccia: br. R. to Sollacaro	594
63·2	39·3	Olmeto (O., T.): br. L. to Fozzano	325
69·7	43·3	Pont de Baraci	11
72·4	45·0	Propriano (O., T.)	28
73·8	45·9	br. L. to Arbellara	80
75·6	47·0	Pont de Rena Bianca over R. Rizzanèse	10
75·7	47·1	br. R. to Belvedère and Campo Moro	10
79·8	49·6	br. L. to Aullène	60
85·6	53·2	Sartène (O., T.): br. R. to Aullène (N. 194, Route V)	299
88·1	54·7	Bocca Albitrina: br. R. to Tizzano and Campo Moro	290
94·5	58·7	br. L. to Guincheto	250
101·4	63·0	Pont d'Ortolo	19
106·0	65·8	Col de Coralli	99
108·0	67·1	Coast of Golfe de Ventilegne	25
114·1	70·8	br. L. to Monacia	60
119·1	74·0	Pianottoli (O., T.)	100
121·7	75·6	Pont de Figari	3
124·3	77·2	Col de la Testa: br. L. to Tivarello and Porto-Vecchio	75
128·9	80·0	Pont de Ventilegne	20
132·5	82·3	Col d'Orbia	128
136·4	84·7	br. L. to Porto-Vecchio (N. 198, Route III)	70
139·0	86·3	Bonifacio (O.,T.)	28

Route II. *Ajaccio to Bastia, via Vizzavone, Ponte-Leccia and Casamozza* (p. 145)

Km.	Miles	Point on route	m.
0·0	0·0	Ajaccio (St., O., T.) (Place du Diamant)	38
2·8	1·7	br. R. to Bonifacio (N. 196, Route I)	20
6·5	4·0	Mezzavia: br. L. to Sagone and Calvi	36
12·0	7·5	br. L. to Sarrola-Carcopino	60
17·1	10·6	Col de Carazzi	204
18·2	11·3	Pont de Carazzi	161
20·7	12·8	br. R. to Carbuccia	200
28·3	17·6	Pont d'Ucciani over R. Gravone	288
29·0	18·0	br. R. to Ucciani and Bastelica	300
40·0	24·9	Bocognano (St., O., T.)	620
43·0	26·8	Pont de Traghieta	761
45·4	28·3	Pont de Solella	869
48·8	30·4	Col de Vizzavone	1162
51·6	32·1	Vizzavone (St., O., T.)	906
55·0	34·2	Tattone (St.)	638
59·1	36·8	Col de la Serra: br. R. to Ghisoni, thence Sartène (N. 194, Route V) and Ghisonaccia	804
61·0	37·9	Vivario (St., O., T.)	658
64·6	40·2	Ponte de Vivario over R. Gravone	428
68·0	42·3	Pont du Fiume Secco	437
70·6	43·9	Venaco (St., O., T.): br. R. to Lugo	574
74·1	46·0	Col de San Catero Cervone	736
74·3	46·2	br. R. to Riventosa	471
74·4	46·3	Pont de Misogno	741
82·3	51·1	br. R. to Aléria (N. 200, Route VI); Pont génois de la Restonica over R. Restonica	396
82·5	51·3	Pont de la Tavignano	396
83·0	51·6	Corte (St., O., T.)	406
84·0	52·2	br. L. to Castirla	410
90·9	56·4	br. R. to Tralonca	560
91·0	56·5	Col de San Quilico	569
93·1	57·8	Soveria (St., O., T.)	456
97·1	60·3	Caporalino: br. R. to Omessa	300
98·9	61·4	br. R. to Castirla	265
99·2	61·6	Francardo (St.)	261
99·5	61·8	Bridge over R. Golo	261
103·5	64·3	br. R. to San Lorenzo	230
107·5	66·8	Ponte-Leccia (St., O., T.): br. R. to Morosaglia, br. L. to Ile-Rousse (N. 197, Route V)	195
115·5	73·0	Ponte-Nuovo (St., O.)	167
119·7	74·3	Bridge over R. Golo	150
125·6	78·0	Barchetta (St.)	98
125·9	78·2	br. L. to Lento, br. R. to Ortiporio	95
134·5	73·5	Casamozza (St.): br. R. to Aléria and Bonifacio (N. 193, Route III)	32
137·5	75·4	br. L. to Lucciana	30
139·1	76·4	br. L. to Borgo	26
144·7	89·9	Pont de Bevinco over R. Bevinco	10
145·7	90·5	br. L. to Murato, Oletta, St Florent	10
146·8	91·2	br. L. to Biguglia	10
155·0	96·3	Bastia (St., O., T.) (Place du Palais)	71

Route III. *Ajaccio to Bastia, via Calvi and St Florent* (p. 147)

0·0	0·0	Ajaccio (St., O., T.) (Place du Diamant)	38
2·8	1·7	br. R. to Cauro (N. 196, Route I)	20
6·5	4·0	Mezzavia: br. R. to Corte (N. 193)	36
13·5	8·3	Col de Listincone: br. R. to Appietto, br. L. to Col de Carbiniccio and Ajaccio	239
19·2	11·9	Col de St Bastiano	415
27·0	16·8	Bridge over R. Liscia	7
31·9	19·8	br. R. to Casaglione	7
32·8	20·4	Bridge over R. Liamone	5
33·6	20·9	br. R. to Coggia	5
38·0	23·6	Sagone (O., T.): br. R. to Vico	20
39·0	24·2	Bridge over R. Sagone	20
51·5	32·0	Cargèse (O., T.)	82
59·3	36·9	Bridge over R. Chioni	20
67·3	41·8	Col St Martino	429
69·9	43·5	Col de Lava	498
71·0	44·1	Piana (O., T.)	438
81·2	50·4	br. R. to Evisa	40

82·2	51·0	Porto: br. R. to Ota and Evisa	50
87·2	54·2	br. R. to Serriera	34
94·1	58·5	Partinello (O., T.)	214
101·6	63·0	br. L. to Osani	264
102·9	63·9	Col de la Croix	272
115·3	71·7	Col de Parmarella	374
126·3	78·5	br. R. to Monte Estremo	30
128·4	79·8	br L. to coast at Galéria	20
128·8	80·0	Bridge over R. Fango	10
134·7	83·7	Bocca Bassa	120
146·2	90·8	Bocca Seria	149
163·5	101·6	Calvi (St., O., T.)	2
167·0	103·7	br. R. to Bonifatto	8
168·3	104·6	br. R. to Calenzana	8
169·4	105·2	Bridge over Fiume Secco	8
173·5	107·8	Lumio (O., T.)	203
173·7	107·9	br. R. to Muro and Ponte-Leccia (N. 197, Route V)	203
179·3	111·4	Algajola (St.)	20
186·3	115·7	br. R. to Corbara	71
188·0	116·8	Ile-Rousse (St., O., T.)	20
195·7	121·6	Pont de Lozari over R. Regino	30
196·0	121·8	br. R. to Belgodère	30
204·8	127·2	Bridge over R. Ostriconi	11
207·5	128·9	br. R. to Pietralba	70
213·3	132·1	Col de Lavezzo	312
224·1	139·3	Casta	250
231·0	143·5	br. R. to St Pietro di Tenda	182
234·9	145·8	Bridge over R. Aliso	10
235·0	145·9	br. R. to Oletta	10
236·0	146·6	St Florent (O., T.)	10
241·0	149·7	br. L. to Nonza and Cap Corse (N. 198, Route VII)	76
248·2	154·0	br. R. to Oletta	510
248·9	154·6	Col de Teghime	541
259·5	161·2	Bastia (St., O., T.) (Place du Palais)	71

Route IV. *Bastia to Bonifacio, via Casamozza and Porto-Vecchio* (p. 147)

Km.	Miles	Point on route	m.
0·0	0·0	Bastia (St., O., T.) (For details to Casamozza see Route II)	71
20·5	13·0	Casamozza (St.): br. R. to Ponte-Leccia (N. 193, Route II)	32
21·1	13·6	Bridge over R. Golo	30
23·3	14·5	br. R. to Vescovato	41
24·3	15·1	Arena (St.)	40
32·4	20·1	Folelli (St.): br. R. to Orezza	30
32·8	20·4	Bridge over Fium' Alto	30
36·4	22·6	Figareto: br. R. to Poggio	15
41·0	25·5	Padulella (St.): br. R. to San Nicolao	8
47·3	29·4	Prunete (St.): br. R. to Cervione	20
50·8	31·6	Bridge over R. Alesani	1
54·3	33·8	Alistro (St., O.)	26
55·2	34·3	Bridge over R. Alistro	9
60·6	37·7	Bridge over R. Bravone	6
67·5	41·9	br. R. to Tallone	6
67·8	42·1	Bridge over R. Arena	5
72·2	44·8	Cateraggio: br. R. to coast and br. L. to Corte (N. 200, Route VI)	4
72·3	44·9	Bridge over R. Tavignano	4
73·2	45·5	Aléria (St., O., T.): br. R. to Aléria station	20
77·3	48·0	br. R. to Vezzani	22
88·0	54·7	Ghisonaccia (St., O., T.): br. L. to coast at Vignale, br. R. to Ghisoni	8
88·9	55·3	Bridge over Fium' Orbo	6
90·0	55·9	br. L. to coast at Calzarello, br. R. to Poggio di Nazza	10
92·6	57·6	Bridge over R. Abatesco	3
99·9	62·0	br. R. to Ventiseri	20
100·0	62·1	Bridge over R. Travo	20
102·3	63·5	br. R. to Solaro	8
106·1	65·9	Bridge over R. Solenzara	5
106·3	66·0	br. R. to Zonza	5
112·1	69·7	Solenzara (St., O., T.)	5
117·7	73·2	Bridge over R. Favone	5
118·1	73·4	Favone	5
121·8	75·7	Bridge over R. Tarco	15
131·0	81·4	Bridge over R. Cavo	40
131·6	81·8	Ste Lucie de Porto-Vecchio (O., T.): br. R. to Conca, br. L. to coast at Pinarello	44
134·0	83·2	Col de Lecci	110
136·8	85·0	Bridge over R. Oso	60
141·9	88·2	Ste Trinité	65
145·7	90·5	br. R. to Zonza	65
147·0	91·3	Porto-Vecchio (St., O., T.)	67
148·7	92·4	Bridge over R. Stabiacco	9
149·2	92·7	br. R. to Sotta	10
158·5	98·5	Col d'Aresia	72
171·4	106·5	br. R. to Sartène	70
174·0	108·1	Bonifacio (O., T.)	64

Route V. *Bonifacio to Calvi, via Sartène, Vivario, Ponte-Leccia and Belgodère* (p. 147)

Km.	Miles	Point on route	m.
0·0	0·0	Bonifacio (O., T.) (For details to Sartène see Route I)	64
53·4	33·1	Sartène (O., T.)	299
54·1	33·6	br. R. to Granace	250
59·0	36·7	br. L. to Propriano	52
63·1	39·1	Pont de la Polmona over R. Fiumicicoli	70
63·5	39·4	Col de Forcina	75
63·7	39·5	br. R. to Sta Lucia di Tallano	75
63·8	39·6	Pont de Forcina over R. Rizzanèse	56
64·0	39·8	br. L. to Arbellara	60
73·1	46·0	Loreto di Tallano	272
77·8	48·3	Cargiaca (O., T.)	415
82·0	50·9	br. R. to Zerubia	590
86·9	54·0	Aullène (O., T.): br. R. to Serra-di-Scopamène	834
94·9	59·0	Fozzaninco	1030
95·8	59·6	Bridge over R. Costione	1055
99·5	61·8	Col de la Vaccia	1199
113·9	70·8	Zicavo (O., T.): br. L. to Guitera	715
117·6	73·1	Cozzano (O., T.): br. L. to Guitera	728
120·6	75·0	br. L. to Palneca	777
135·2	84·0	Foca di Verde	1345
152·4	94·7	Ghisoni (O., T.): br. R. to Ghisonaccia	658
162·6	101·0	Col de la Sorba	1314
168·9	104·9	Col de la Serra: br. L. to Ajaccio (N. 193, Route II)	804
170·8	106·1	Vivario (St., O., T.) (For details from Vivario to Ponte-Leccia see Route II)	658
192·8	119·8	Corte (St., O., T.)	406
217·3	135·0	Ponte-Leccia (St., O., T.): br. R. to Bastia (N. 193, Route II)	195
220·0	136·7	br. L. to Asco	192
220·2	136·8	Bridge over R. Asco	190
224·0	139·1	br. R. to Pietralba	270
234·0	145·3	br. R. to Novella	310
242·3	150·5	Col de San Colombano	682
243·7	151·4	br. L. to Olmi-Capella	650
250·3	155·5	Belgodère (St., O., T.)	310
258·8	160·8	Ville-di-Paraso: br. R. to Ile-Rousse, br. L. to Speloncato	450
265·3	164·9	br. L. to Speloncato	430
268·5	166·9	Feliceto (O., T.)	400
272·5	169·3	Muro (O., T.)	320
275·8	171·4	br. R. to Avapessa	350
277·6	172·5	Col de San Cesareo: br. R. to Ile-Rousse, br. L. to Montemaggiore	368
285·8	177·6	Junction with Calvi-Bastia road (N. 199, Route IV)	203
296·0	183·9	Calvi (St., O., T.)	2

Route VI. *Corte to Aléria, via the Tavignano valley* (p. 147)

0·0	0·0	Corte (St., O., T.)	406
0·5	0·3	Bridge over R. Tavignano	396
0·7	0·4	Bridge over R. Restonica	396
0·9	0·6	br. R. to Venaco	396
9·1	5·7	br. R. to Poggio di Venaco	300
16·7	10·3	Bridge over R. Vecchio	211
19·1	11·9	Bridge over R. Tavignano	170
37·0	23·0	br. L. to Pancheraccia	54
37·1	23·1	Corsigliese	54
43·5	27·0	Vaccajo	25
49·5	30·7	Cateraggio: br. L. to Bastia. (Junction with N. 198, Route III)	4
50·5	31·3	Aléria (St., O., T.)	20

Route VII. *Bastia to St Florent, via Cap Corse* (pp. 147–8)

Km.	Miles	Point on route	m.
0·0	0·0	Bastia (St., O., T.) (Place du Palais)	71
3·9	2·4	Pietranera	6
6·2	3·9	Marine de Miamo: br. L. to Sta Maria di Lota	6
8·2	5·1	br. L. to Brando	7
8·6	5·3	Lavasina	8
10·9	6·8	Erbalunga (O., T.)	8
16·8	10·4	Marine de Sisco (O., T.): br. L. to Pietrapiana	7
20·5	12·7	Marine de Pietracorbara (O., T.)	7
22·3	13·8	Tour de Losse	9
25·8	16·0	Marine de Porticciolo	6
26·3	16·3	br. L. to Cagnano	7
28·5	17·7	Sta Severa: br. L. to Luri	8
35·0	21·7	Marine de Meria (O., T.): br. L. to Meria and Morsiglia	9
38·5	23·9	Macinaggio (O., T.)	10
39·5	24·5	br. L. to Rogliano	85
41·2	25·6	br. L. to Rogliano	135
43·5	27·0	br. L. to Rogliano	204
47·7	29·6	Col de St Nicolas	300
49·0	30·4	Botticella	220
50·5	31·4	Col de la Serra	361
53·0	32·9	Camera: br. L. to coast at Centuri	228
55·0	34·2	Pecorile	196
55·5	34·5	Pruno (O., T.): L. R. to Centuri, br. L. to Casanova	181
63·5	39·4	Crocce: br. L. to Luri	150
64·0	39·8	Pino (O., T.)	140
69·0	42·9	Minervia	201
73·5	46·0	br. R. to Marine de Giottani	25
77·0	47·8	Marinca	124
82·6	51·3	Marine d'Albo: br. R. to Ogliastro	10
87·2	54·5	Nonza (O., T.)	158
89·7	55·7	br. L. to Celle	100
98·5	61·2	Marine de Farinole (O., T.)	22
104·2	64·7	Col de San Bernadino (Junction with N. 199, Route III)	76
122·7	76·2	St Florent (O., T.)	10

Appendix VII

NOTE ON PLACE-NAMES

The place-names of Corsica frequently have alternative forms in French and in the Corsican dialect, which is essentially Italian (see p. 116). While these alternative forms seldom show marked differences, the most striking are:

French	Italian
Calanques	Calanches
Campo dell' Oro	Campodiloro
Chataigneraie	Castagniccia
Ile-Rousse	Isola Rossa
St Florent	San Fiorenzo
St Laurent	San Lorenzo

The other main variations may be summarized as follows:

(1) The use of 'Saint' or 'Sainte', as well as 'San', 'Santa' and 'Santo'.

(2) The alternation of a final 'e' for 'a', e.g. Vizzavone and Vizzavona, Sagone and Sagona.

(3) The substitution of 'j' for 'i', e.g. Algajola and Algaiola.

(4) The indiscriminate use of 'de' and 'di'. This often results in confusion when French and Italian forms are used in the same name, e.g. Pointe de Pozzo di Borgo.

(5) Alternative forms for many topographical prefixes. The most important of these are:

French	Italian	French	Italian
Cap de	Capo di	Pointe de	Punta della
Golfe de	Golfo di	Marine de	Marina di
Ile de	Isola	Forêt de	Foresta da
Étang de	Stagno di	Rivière de	Fiume di or Rio
Lac de	Lago di or della	Col de	Passo di

There is a certain amount of confusion over the names of mountains. Many are given the Italian forms of 'Capo alla', 'Capo della' or 'Capo d'', while the French term 'Cap' is almost entirely restricted to coastal features. The abbreviation 'Mt' is used officially for the prefix 'Monte', which is pronounced as two syllables.

French official practice has been to accept the name most commonly in use locally, whether French or Italian. In Cap Corse, in the east and in the south, Italian names tend to predominate, while French names are more numerous in the west, but this distribution is by no means regular.

The policy of this Handbook has been to follow the official practice, adopted in the following publications:

(1) *Didot-Bottin*, *Annuaire du Commerce* (Paris, annually). This gives the names of administrative divisions, communes and hamlets.

(2) *Instructions Nautiques: Mer Mediterranée—France* (*Côte Sud et Corse*) (Paris, 1932). This gives the names of coastal and other topographical features. Sheet NK 32 (Ajaccio) of the *Carte de France et des Pays Limitrophes* (1 : 500,000), reproduced by the G.S.G.S. (No. 4240), is folded in the cover at the back of this Handbook. In the main, official forms are given on this map, but it will be noted that there are a few minor divergences.

LIST OF CONVERSION TABLES

PAGE
1. Length 212
2. Area 212
3. Yield per Unit Area 212
4. Volume and Capacity 213
5. Weight 213
6. Centimetres to Inches 214
7. Metres to Feet 214
8. Kilometres to British Statute Miles 218
9. Kilometres to British Nautical Miles 218
10. Square Metres to Square Feet 219
11. Hectares to Acres 219
12. Square Kilometres to Square Miles 220
13. Numbers per Square Kilometre to Numbers per Square Mile 220
14. Quintals per Hectare to Tons per Acre 221
15. Cubic Metres to Cubic Feet 221
16. Litres to Gallons 222
17. Kilogrammes to Pounds 222
18. Temperature: Equivalents of Fahrenheit and Centigrade Scales 223
19. Pressure: Equivalents of Millibars, Millimetres of Mercury, and Inches of Mercury at 32° F. in Latitude 45° 225
20. Petroleum Products. Volume per unit weight and weight per unit volume of liquid 226

METRIC AND BRITISH UNITS

It is customary to think of the 'metre' and the 'yard' as representing unalterable units of length. This is not so. The metre was originally intended to be the 10,000,000th part of the earth's meridional quadrant. But the accurate determination of this length proved to be extremely difficult—partly for technical reasons, and partly because of different conceptions of the 'figure of the earth'. In view of these difficulties it became necessary to define the length of the metre in terms of suitable metal bars measured under specified conditions of temperature, pressure, humidity, etc. Similar standard bars were also used to define the length of other units such as the yard. As all these metallic standards are subject to change, conversion tables differ according to the date of comparison between different bars. The tables that follow are based on the comparison between the yard and the metre made in 1895. This made 1 metre equivalent to 39·370113 inches.

The first five tables provide the ratios between units of the same kind, e.g. length, area, etc. For convenience in printing, negative powers of 10 have been used to indicate very small fractions, instead of the decimal system. Thus the figure 0·00000032 becomes $3{\cdot}2 \times 10^{-7}$; the first significant figure is the *seventh* after the decimal point. Conversely, $7{\cdot}34 \times 10^{-5}$ becomes 0·0000734.

Tables 6–18 give more fully the ratios between metric units and their equivalent British units. Metric digits (*0* to *9*) are printed in italics at the top of each table, reading horizontally from left to right. Metric tens, likewise in italics, read vertically from top to bottom on the left of the table. Thus, in Table 6, to convert *87* centimetres into inches, read *8* down on the left, then move horizontally to the right to the *7* digit column, where the answer 34·252 is read.

Metric System. List of Prefixes

Deca means ten times.	Deci means a tenth part of.
Hecto means a hundred times.	Centi means a hundredth part of.
Kilo means a thousand times.	Milli means a thousandth part of.

In abbreviations the Decametre, etc., is Dm., and the decimetre, etc., dm.

Note on 'Nautical', 'Geographical' and Statute' miles

A British 'nautical mile' is the length of the minute of the meridian at any given latitude, and is therefore a variable unit. It is given in feet for Clarke's 1880 spheroid by the formula

$$60771{\cdot}1 - 30{\cdot}7 \cos 2 \text{ Lat.}$$

This is the sea mile of the scale of latitude and distance of the Admiralty Charts. From the above formula it will be found to vary from 6,046·4 ft. at the equator to 6,107·8 ft. at the poles, being 6,077·1 ft. at latitude 45°.

The so-called 'international nautical mile' of 1,852 m. or 6,076 ft. is the length of the minute of the meridian at latitude 45° on the International Spheroid. This corresponds to the 6,077 ft. for Clarke's spheroid.

A 'geographical mile' is a fixed unit, being defined by some as the length of a minute of the equator and by others as that of the minute of the meridian at latitude 45°. According to the former definition its value on Clarke's spheroid is 6,087 ft. and according to the latter 6,077 ft. The round figure 6,080 is usually adopted for the purposes of ordinary navigation.

The British 'statute mile' measures 5,280 ft.

Table 1. *Length*

Nautical mile	Statute mile	Kilometre	Metre	Yard	Foot	Inch	Centimetre
1	1·152	1·853	1853	2027	6080*	72,960	185,300
$8{\cdot}684 \times 10^{-1}$	*1*	1·60934	1609·34	1760	5280	63,360	160,934
$5{\cdot}396 \times 10^{-1}$	$6{\cdot}21372 \times 10^{-1}$	*1*	1000	1093·61	3280·84	39,370·1	100,000
$5{\cdot}396 \times 10^{-4}$	$6{\cdot}21372 \times 10^{-4}$	$1{\cdot}0 \times 10^{-3}$	*1*	1·09361	3·28084	39·3701	100
$4{\cdot}934 \times 10^{-4}$	$5{\cdot}68182 \times 10^{-4}$	$9{\cdot}14399 \times 10^{-4}$	$9{\cdot}14399 \times 10^{-1}$	*1*	3	36	91·4399
$1{\cdot}645 \times 10^{-4}$	$1{\cdot}89394 \times 10^{-4}$	$3{\cdot}048 \times 10^{-4}$	$3{\cdot}048 \times 10^{-1}$	$3{\cdot}33333 \times 10^{-1}$	*1*	12	30·48
$1{\cdot}371 \times 10^{-5}$	$1{\cdot}57828 \times 10^{-5}$	$2{\cdot}54 \times 10^{-5}$	$2{\cdot}54 \times 10^{-2}$	$2{\cdot}77778 \times 10^{-2}$	$8{\cdot}33333 \times 10^{-2}$	*1*	2·54
$5{\cdot}390 \times 10^{-6}$	$6{\cdot}21372 \times 10^{-6}$	$1{\cdot}0 \times 10^{-5}$	$1{\cdot}0 \times 10^{-2}$	$1{\cdot}09361 \times 10^{-2}$	$3{\cdot}28084 \times 10^{-2}$	$3{\cdot}93701 \times 10^{-1}$	*1*

* This is the customary British practice, and not the 'international nautical mile,' which Great Britain has not adopted.

Table 2. *Area*

Square mile	Square kilometre	Hectare	Acre	Square metre	Square yard
1	2·58998	258·998	640	$258{,}998 \times 10$	$30{,}976 \times 10^{2}$
$3{\cdot}86103 \times 10^{-1}$	*1*	100	247·106	1,000,000	$119{,}599 \times 10$
$3{\cdot}86103 \times 10^{-3}$	$1{\cdot}0 \times 10^{-2}$	*1*	2·47106	10,000	11,959·9
$1{\cdot}5625 \times 10^{-3}$	$4{\cdot}04685 \times 10^{-3}$	$4{\cdot}04685 \times 10^{-1}$	*1*	4046·85	4840
$3{\cdot}86103 \times 10^{-7}$	$1{\cdot}0 \times 10^{-6}$	$1{\cdot}0 \times 10^{-4}$	$2{\cdot}47106 \times 10^{-4}$	*1*	1·19599
$3{\cdot}22831 \times 10^{-7}$	$8{\cdot}36126 \times 10^{-7}$	$8{\cdot}36126 \times 10^{-5}$	$2{\cdot}06612 \times 10^{-4}$	$8{\cdot}36126 \times 10^{-1}$	*1*

Table 3. *Yield per Unit Area*

Tons per acre	Metric tons per hectare	Quintals per hectare
1	2·51071	25·1071
$3{\cdot}98294 \times 10^{-1}$	*1*	10
$3{\cdot}98294 \times 10^{-2}$	$1{\cdot}0 \times 10^{-1}$	*1*

Table 4. *Volume and Capacity*

Kilolitre	Cubic metre	Cubic yard	Bushel	Cubic feet	Imp. gall.	Litre	Pint
1	1·000027	1·30799	27·4969	35·3157	219·976	1000	1759·80
$9·99973 \times 10^{-1}$	1	1·30795	27·4962	35·3148	219·970	999·973	1759·75
$7·64532 \times 10^{-1}$	$7·64553 \times 10^{-1}$	1	21·0223	27	168·178	764·532	1345·43
$3·63677 \times 10^{-2}$	$3·63687 \times 10^{-2}$	$4·75685 \times 10^{-2}$	1	1·28435	8	36·3677	64
$2·83160 \times 10^{-2}$	$2·83167 \times 10^{-2}$	$3·70370 \times 10^{-2}$	$7·78602 \times 10^{-1}$	1	6·22882	28·3160	49·8306
$4·54596 \times 10^{-3}$	$4·54608 \times 10^{-3}$	$5·94607 \times 10^{-3}$	$1·25 \times 10^{-1}$	$1·60544 \times 10^{-1}$	1	4·54596	8
$1·0 \times 10^{-3}$	$1·000027 \times 10^{-3}$	$1·30799 \times 10^{-3}$	$2·74969 \times 10^{-2}$	$3·53157 \times 10^{-2}$	$2·19976 \times 10^{-1}$	1	1·75980
$5·68245 \times 10^{-4}$	$5·68260 \times 10^{-4}$	$7·43258 \times 10^{-4}$	$1·5625 \times 10^{-2}$	$2·00680 \times 10^{-2}$	$1·25 \times 10^{-1}$	$5·68245 \times 10^{-1}$	1

Table 5. *Weight*

Ton	Metric ton or Millier	Quintal	Kilogram	lb.
1	1·01605	10·1605	1016·05	2240
$9·84207 \times 10^{-1}$	1	10	1000	2204·62
$9·84207 \times 10^{-2}$	$1·0 \times 10^{-1}$	1	100	220·462
$9·84207 \times 10^{-4}$	$1·0 \times 10^{-3}$	$1·0 \times 10^{-2}$	1	2·20462
$4·46429 \times 10^{-4}$	$4·53592 \times 10^{-4}$	$4·53592 \times 10^{-3}$	$4·53592 \times 10^{-1}$	1

Table 6. *Centimetres to Inches*

1 cm. = 0·393701 in.

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
—	—	0·394	0·787	1·181	1·575	1·969	2·362	2·756	3·150	3·543
1	3·937	4·331	4·724	5·118	5·512	5·906	6·299	6·693	7·087	7·480
2	7·874	8·268	8·661	9·055	9·449	9·843	10·236	10·630	11·024	11·417
3	11·811	12·205	12·598	12·992	13·386	13·780	14·173	14·567	14·961	15·354
4	15·748	16·142	16·535	16·929	17·323	17·717	18·110	18·504	18·898	19·291
5	19·685	20·079	20·472	20·866	21·260	21·654	22·047	22·441	22·835	23·228
6	23·622	24·016	24·409	24·803	25·197	25·591	25·984	26·378	26·772	27·165
7	27·559	27·953	28·346	28·740	29·134	29·528	29·921	30·315	30·709	31·102
8	31·496	31·890	32·283	32·677	33·071	33·465	33·858	34·252	34·646	35·039
9	35·433	35·827	36·220	36·614	37·008	37·402	37·795	38·189	38·583	38·976
10	39·370									

Table 7. *Metres to Feet*

1 m. = 3·28084 ft.

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
—	—	3·3	6·6	9·8	13·1	16·4	19·7	23·0	26·3	29·5
1	32·8	36·1	39·4	42·7	45·9	49·2	52·5	55·8	59·1	62·3
2	65·6	68·9	72·2	75·5	78·7	82·0	85·3	88·6	91·9	95·1
3	98·4	101·7	105·0	108·3	111·6	114·8	118·1	121·4	124·7	128·0
4	131·2	134·5	137·8	141·1	144·4	147·6	150·9	154·2	157·5	160·8
5	164·0	167·3	170·6	173·9	177·2	180·5	183·7	187·0	190·3	193·6
6	196·9	200·1	203·4	206·7	210·0	213·3	216·5	219·8	223·1	226·4
7	229·7	232·9	236·2	239·5	242·8	246·1	249·3	252·6	255·9	259·2
8	262·5	265·8	269·0	272·3	275·6	278·9	282·2	285·4	288·7	292·0
9	295·3	298·6	301·8	305·1	308·4	311·7	315·0	318·2	321·5	324·8
10	328·1	331·4	334·6	337·9	341·2	344·5	347·8	351·0	354·3	357·6

Table 7 (*continued*). *Metres to Feet*

	0	1	2	3	4	5	6	7	8	9
11	360·9	364·2	357·5	370·7	374·0	377·3	380·6	383·9	387·1	390·4
12	393·7	397·0	400·3	403·5	406·8	410·1	413·4	416·7	419·9	423·2
13	426·5	429·8	433·1	436·4	439·6	442·9	446·2	449·5	452·8	456·0
14	459·3	462·6	465·9	469·2	472·4	475·7	479·0	482·3	485·6	488·8
15	492·1	495·4	498·7	502·0	505·2	508·5	511·8	515·1	518·4	521·7
16	524·9	528·2	531·5	534·8	538·1	541·3	544·6	547·9	551·2	554·5
17	557·7	561·0	564·3	567·6	570·9	574·1	577·4	580·7	584·0	587·3
18	590·6	593·8	597·1	600·4	603·7	607·0	610·2	613·5	616·8	620·1
19	623·4	626·6	629·9	633·2	636·5	639·8	643·0	646·3	649·6	652·9
20	656·2	659·4	662·7	666·0	669·3	672·6	675·9	679·1	682·4	685·7
21	689·0	692·3	695·5	698·8	702·1	705·4	708·7	711·9	715·2	718·5
22	721·8	725·1	728·3	731·6	734·9	738·2	741·5	744·8	748·0	751·3
23	754·6	757·9	761·2	764·4	767·7	771·0	774·3	777·6	780·8	784·1
24	787·4	790·7	794·0	797·2	800·5	803·8	807·1	810·4	813·7	816·9
25	820·2	823·5	826·8	830·1	833·3	836·6	839·9	843·2	846·5	849·7
26	853·0	856·3	859·6	862·9	866·1	869·4	872·7	876·0	879·3	882·5
27	885·8	889·1	892·4	895·7	899·0	902·2	905·5	908·8	912·1	915·4
28	918·6	921·9	925·2	928·5	931·8	935·0	938·3	941·6	944·9	948·2
29	951·4	954·7	958·0	961·3	964·6	967·8	971·1	974·4	977·7	981·0
30	984·3	987·5	990·8	994·1	997·4	1000·7	1003·9	1007·2	1010·5	1013·8
31	1017·1	1020·3	1023·6	1026·9	1030·2	1033·5	1036·7	1040·0	1043·3	1046·6
32	1049·9	1053·1	1056·4	1059·7	1063·0	1066·3	1069·6	1072·8	1076·1	1079·4
33	1082·7	1086·0	1089·2	1092·5	1095·8	1099·1	1102·4	1105·6	1108·9	1112·2
34	1115·5	1118·8	1122·0	1125·3	1128·6	1131·9	1135·2	1138·5	1141·7	1145·0
35	1148·3	1151·6	1154·9	1158·1	1161·4	1164·7	1168·0	1171·3	1174·5	1177·8
36	1181·1	1184·4	1187·7	1190·9	1194·2	1197·5	1200·8	1204·1	1207·3	1210·6
37	1213·9	1217·2	1220·5	1223·8	1227·0	1230·3	1233·6	1236·9	1240·2	1243·4
38	1246·7	1250·0	1253·3	1256·6	1259·8	1263·1	1266·4	1269·7	1273·0	1276·2
39	1279·5	1282·8	1286·1	1289·4	1292·7	1295·9	1299·2	1302·5	1305·8	1309·1
40	1312·3	1315·6	1318·9	1322·2	1325·5	1328·7	1332·0	1335·3	1338·6	1341·9

Table 7 (*continued*). *Metres to Feet*

	0	1	2	3	4	5	6	7	8	9
41	1345·1	1348·4	1351·7	1355·0	1358·3	1361·5	1364·8	1368·1	1371·4	1374·7
42	1378·0	1381·2	1384·5	1387·8	1391·1	1394·4	1397·6	1400·9	1404·2	1407·5
43	1410·8	1414·0	1417·3	1420·6	1423·9	1427·2	1430·4	1433·7	1437·0	1440·3
44	1443·6	1446·9	1450·1	1453·4	1456·7	1460·0	1463·3	1466·5	1469·8	1473·1
45	1476·4	1479·7	1482·9	1486·2	1489·5	1492·8	1496·1	1499·3	1502·6	1505·9
46	1509·2	1512·5	1515·7	1519·0	1522·3	1525·6	1528·9	1532·2	1535·4	1538·7
47	1542·0	1545·3	1548·6	1551·8	1555·1	1558·4	1561·7	1565·0	1568·2	1571·5
48	1574·8	1578·1	1581·4	1584·6	1587·9	1591·2	1594·5	1597·8	1601·0	1604·3
49	1607·6	1610·9	1614·2	1617·5	1620·7	1624·0	1627·3	1630·6	1633·9	1637·1
50	1640·4	1643·7	1647·0	1650·3	1653·6	1656·8	1660·1	1663·4	1666·7	1669·9
51	1673·2	1676·5	1679·8	1683·1	1686·4	1689·6	1692·9	1696·2	1699·5	1702·8
52	1706·0	1709·3	1712·6	1715·9	1719·2	1722·4	1725·7	1729·0	1732·3	1735·6
53	1738·8	1742·1	1745·4	1748·7	1752·0	1755·2	1758·5	1761·8	1765·1	1768·4
54	1771·7	1774·9	1778·2	1781·5	1784·8	1788·1	1791·3	1794·6	1797·9	1801·2
55	1804·5	1807·8	1811·0	1814·3	1817·6	1820·9	1824·1	1827·4	1830·7	1834·0
56	1837·3	1840·6	1843·8	1847·1	1850·4	1853·7	1857·0	1860·2	1863·5	1866·8
57	1870·1	1873·4	1876·6	1879·9	1883·2	1886·5	1889·8	1893·0	1896·3	1899·6
58	1902·9	1906·2	1909·4	1912·7	1916·0	1919·3	1922·6	1925·9	1929·1	1932·4
59	1935·7	1939·0	1942·3	1945·5	1948·8	1952·1	1955·4	1958·7	1961·9	1965·2
60	1968·5	1971·8	1975·1	1978·3	1981·6	1984·9	1988·2	1991·5	1994·8	1998·0
61	2001·3	2004·6	2007·9	2011·1	2014·4	2017·7	2021·0	2024·3	2027·6	2030·8
62	2034·1	2037·4	2040·7	2044·0	2047·2	2050·5	2053·8	2057·1	2060·4	2063·6
63	2066·9	2070·2	2073·5	2076·8	2080·1	2083·3	2086·6	2089·9	2093·2	2096·5
64	2099·7	2103·0	2106·3	2109·6	2112·9	2116·1	2119·4	2122·7	2126·0	2129·3
65	2132·5	2135·8	2139·1	2142·4	2145·7	2149·0	2152·3	2155·5	2158·8	2162·1
66	2165·4	2168·6	2171·9	2175·2	2178·5	2181·8	2185·1	2188·3	2191·6	2194·9
67	2198·2	2201·5	2204·7	2208·0	2211·3	2214·6	2217·9	2221·1	2224·4	2227·7
68	2231·0	2234·3	2237·5	2240·8	2244·1	2247·4	2250·7	2253·9	2257·2	2260·5
69	2263·8	2267·1	2270·4	2273·6	2276·9	2280·2	2283·5	2286·8	2290·0	2293·3
70	2296·6	2299·9	2303·2	2306·4	2309·7	2313·0	2316·3	2319·6	2322·8	2326·1

Table 7 (*continued*). *Metres to Feet*

	0	1	2	3	4	5	6	7	8	9
71	2329·4	2332·7	2336·0	2339·2	2342·5	2345·8	2349·1	2352·4	2355·6	2358·9
72	2362·2	2365·5	2368·8	2372·0	2375·3	2378·6	2381·9	2385·2	2388·5	2391·7
73	2395·0	2398·3	2401·6	2404·9	2408·1	2411·4	2414·7	2418·0	2421·3	2424·5
74	2427·8	2431·1	2434·4	2437·7	2440·9	2444·2	2447·5	2450·8	2454·1	2457·3
75	2460·6	2463·9	2467·2	2470·5	2473·8	2477·0	2480·3	2483·6	2486·9	2490·2
76	2493·4	2496·7	2500·0	2503·3	2506·6	2509·8	2513·1	2516·4	2519·7	2523·0
77	2526·2	2529·5	2532·8	2536·1	2539·4	2542·7	2545·9	2549·2	2552·5	2555·8
78	2559·1	2562·3	2565·6	2568·9	2572·2	2575·5	2578·7	2582·0	2585·3	2588·6
79	2591·9	2595·1	2598·4	2601·7	2605·0	2608·3	2611·5	2614·8	2618·1	2621·4
80	2624·7	2628·0	2631·2	2634·5	2637·8	2641·1	2644·4	2647·6	2650·9	2654·2
81	2657·5	2660·8	2664·0	2667·3	2670·6	2673·9	2677·2	2680·4	2683·7	2687·0
82	2690·3	2693·6	2696·9	2700·1	2703·4	2706·7	2710·0	2713·3	2716·5	2719·8
83	2723·1	2726·4	2729·7	2732·9	2736·2	2739·5	2742·8	2746·1	2749·3	2752·6
84	2755·9	2759·2	2762·5	2765·7	2769·0	2772·3	2775·6	2778·9	2782·2	2785·4
85	2788·7	2792·0	2795·3	2798·6	2801·8	2805·1	2808·4	2811·7	2815·0	2818·2
86	2821·5	2824·8	2828·1	2831·4	2834·6	2837·9	2841·2	2844·5	2847·8	2851·0
87	2854·3	2857·6	2860·9	2864·2	2867·5	2870·7	2874·0	2877·3	2880·6	2883·9
88	2887·1	2890·4	2893·7	2897·0	2900·3	2903·5	2906·8	2910·1	2913·4	2916·7
89	2919·9	2923·2	2926·5	2929·8	2933·1	2936·4	2939·6	2942·9	2946·2	2949·5
90	2952·8	2956·0	2959·3	2962·6	2965·9	2969·2	2972·4	2975·7	2979·0	2982·3
91	2985·6	2988·8	2992·1	2995·4	2998·7	3002·0	3005·2	3008·5	3011·8	3015·1
92	3018·4	3021·7	3024·9	3028·2	3031·5	3034·8	3038·1	3041·3	3044·6	3047·9
93	3051·2	3054·5	3057·7	3061·0	3064·3	3067·6	3070·9	3074·1	3077·4	3080·7
94	3084·0	3087·3	3090·6	3093·8	3097·1	3100·4	3103·7	3107·0	3110·2	3113·5
95	3116·8	3120·1	3123·4	3126·6	3129·9	3133·2	3136·5	3139·8	3143·0	3146·3
96	3149·6	3152·9	3156·2	3159·4	3162·7	3166·0	3169·3	3172·6	3175·9	3179·1
97	3182·4	3185·7	3189·0	3192·3	3195·5	3198·8	3202·1	3205·4	3208·7	3211·9
98	3215·2	3218·5	3221·8	3225·1	3228·3	3231·6	3234·9	3238·2	3241·5	3244·8
99	3248·0	3251·3	3254·6	3257·9	3261·2	3264·4	3267·7	3271·0	3274·3	3277·6
100	3280·8									

Table 8. *Kilometres to British Statute Miles*

1 km. = 0·621372 mile

	0	1	2	3	4	5	6	7	8	9
—	—	0·621	1·243	1·864	2·485	3·107	3·728	4·350	4·971	5·592
1	6·214	6·835	7·456	8·078	8·699	9·321	9·942	10·563	11·185	11·806
2	12·427	13·049	13·670	14·292	14·913	15·534	16·156	16·777	17·398	18·020
3	18·641	19·263	19·884	20·505	21·127	21·748	22·369	22·991	23·612	24·234
4	24·855	25·476	26·098	26·719	27·340	27·962	28·583	29·204	29·826	30·447
5	31·069	31·690	32·311	32·933	33·554	34·175	34·797	35·418	36·040	36·661
6	37·282	37·904	38·525	39·146	39·768	40·389	41·011	41·632	42·253	42·875
7	43·496	44·117	44·739	45·360	45·982	46·603	47·224	47·846	48·467	49·088
8	49·710	50·331	50·952	51·574	52·195	52·817	53·438	54·059	54·681	55·302
9	55·923	56·545	57·166	57·788	58·409	59·030	59·652	60·273	60·894	61·516
10	62·137									

Table 9. *Kilometres to British Nautical Miles*

1 km. = 0·5396 nautical mile

	0	1	2	3	4	5	6	7	8	9
—	—	0·54	1·08	1·62	2·16	2·70	3·24	3·78	4·32	4·86
1	5·40	5·94	6·48	7·01	7·55	8·09	8·63	9·17	9·71	10·25
2	10·79	11·33	11·87	12·41	12·95	13·49	14·03	14·57	15·11	15·65
3	16·19	16·73	17·27	17·81	18·35	18·89	19·43	19·97	20·50	21·04
4	21·58	22·12	22·66	23·20	23·74	24·28	24·82	25·36	25·90	26·44
5	26·98	27·52	28·06	28·60	29·14	29·68	30·22	30·76	31·30	31·84
6	32·38	32·92	33·46	33·99	34·53	35·07	35·61	36·15	36·69	37·23
7	37·77	38·31	38·85	39·39	39·93	40·47	41·01	41·55	42·09	42·63
8	43·17	43·71	44·25	44·79	45·33	45·87	46·41	46·95	47·48	48·02
9	48·56	49·10	49·64	50·18	50·72	51·26	51·80	52·34	52·88	53·42
10	53·96									

Table 10. *Square Metres to Square Feet*

1 sq. m. = 10·763911 sq. ft.

	0	1	2	3	4	5	6	7	8	9
—	—	10·764	21·528	32·292	43·056	53·820	64·583	75·347	86·111	96·875
1	107·639	118·403	129·167	139·931	150·695	161·459	172·222	182·986	193·750	204·514
2	215·278	226·042	236·806	247·570	258·334	269·098	279·861	290·625	301·389	312·153
3	322·917	333·681	344·445	355·209	365·973	376·737	387·501	398·265	409·029	419·792
4	430·556	441·320	452·084	462·848	473·612	484·376	495·140	505·904	516·668	527·432
5	538·196	548·959	559·723	570·487	581·251	592·015	602·779	613·543	624·307	635·071
6	645·835	656·599	667·363	678·126	688·890	699·654	710·418	721·182	731·946	742·710
7	753·474	764·238	775·002	785·765	796·529	807·293	818·057	828·821	839·585	850·349
8	861·113	871·877	882·641	893·405	904·169	914·932	925·696	936·460	947·224	957·988
9	968·752	979·516	990·280	1001·044	1011·808	1022·572	1033·335	1044·099	1054·863	1065·627
10	1076·3911									

Table 11. *Hectares to Acres*

1 ha. = 2·47106 acres

	0	1	2	3	4	5	6	7	8	9
—	—	2·47	4·94	7·41	9·88	12·36	14·83	17·30	19·77	22·24
1	24·71	27·18	29·65	32·12	34·59	37·07	39·54	42·01	44·48	46·95
2	49·42	51·89	54·36	56·83	59·31	61·78	64·25	66·72	69·19	71·66
3	74·13	76·60	79·07	81·54	84·02	86·49	88·96	91·43	93·90	96·37
4	98·84	101·31	103·78	106·26	108·73	111·20	113·67	116·14	118·61	121·08
5	123·55	126·02	128·50	130·97	133·44	135·91	138·38	140·85	143·32	145·79
6	148·26	150·73	153·21	155·68	158·15	160·62	163·09	165·56	168·03	170·50
7	172·97	175·45	177·92	180·39	182·86	185·33	187·80	190·27	192·74	195·21
8	197·68	200·16	202·63	205·10	207·57	210·04	212·51	214·98	217·45	219·92
9	222·40	224·87	227·34	229·81	232·28	234·75	237·22	239·69	242·16	244·63
10	247·11									

Table 12. *Square Kilometres to Square Miles*

1 sq. km.=0·386103 sq. mile

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
—	—	0·386	0·772	1·158	1·544	1·931	2·317	2·703	3·089	3·475
1	3·861	4·247	4·633	5·019	5·405	5·792	6·178	6·564	6·950	7·336
2	7·722	8·108	8·494	8·880	9·266	9·653	10·039	10·425	10·811	11·197
3	11·583	11·969	12·355	12·741	13·128	13·514	13·900	14·286	14·672	15·058
4	15·444	15·830	16·216	16·602	16·989	17·375	17·761	18·147	18·533	18·919
5	19·305	19·691	20·077	20·463	20·850	21·236	21·622	22·008	22·394	22·780
6	23·166	23·552	23·938	24·324	24·711	25·097	25·483	25·869	26·255	26·641
7	27·027	27·413	27·799	28·186	28·572	28·958	29·344	29·730	30·116	30·502
8	30·888	31·274	31·660	32·047	32·433	32·819	33·205	33·591	33·977	34·363
9	34·749	35·135	35·521	35·908	36·294	36·680	37·066	37·452	37·838	38·224
10	38·610									

Table 13. *Numbers per Square Kilometre to Numbers per Square Mile*

(*or* square miles to square kilometres)

1 sq. mile=2·58998 sq. km.

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
—	—	2·59	5·18	7·77	10·36	12·95	15·54	18·13	20·72	23·31
1	25·90	28·49	31·08	33·67	36·26	38·85	41·44	44·03	46·62	49·21
2	51·80	54·39	56·98	59·57	62·16	64·75	67·34	69·93	72·52	75·11
3	77·70	80·29	82·88	85·47	88·06	90·65	93·24	95·83	98·42	101·01
4	103·60	106·19	108·78	111·37	113·96	116·55	119·14	121·73	124·32	126·91
5	129·50	132·09	134·68	137·27	139·86	142·45	145·04	147·63	150·22	152·81
6	155·40	157·99	160·58	163·17	165·76	168·35	170·94	173·53	176·12	178·71
7	181·30	183·89	186·48	189·07	191·66	194·25	196·84	199·43	202·02	204·61
8	207·20	209·79	212·38	214·97	217·56	220·15	222·74	225·33	227·92	230·51
9	233·10	235·69	238·28	240·87	243·46	246·05	248·64	251·23	253·82	256·41
10	259·00									

Table 14. *Quintals per Hectare to Tons per Acre*

1 quintal per hectare = 0·0398294 ton per acre

	0	1	2	3	4	5	6	7	8	9
—	—	0·03983	0·07966	0·11949	0·15932	0·19915	0·23898	0·27881	0·31864	0·35846
1	0·39829	0·43812	0·47795	0·51778	0·55761	0·59744	0·63727	0·67710	0·71693	0·75676
2	0·79659	0·83642	0·87625	0·91608	0·95591	0·99574	1·03556	1·07539	1·11522	1·15505
3	1·19488	1·23471	1·27454	1·31437	1·35420	1·39401	1·43386	1·47369	1·51352	1·55335
4	1·59318	1·63305	1·67283	1·71266	1·75249	1·79232	1·83215	1·87198	1·91181	1·95164
5	1·99147	2·03130	2·07113	2·11096	2·15079	2·19062	2·23045	2·27028	2·31011	2·34993
6	2·38976	2·42959	2·46942	2·50925	2·54908	2·58891	2·62874	2·66857	2·70840	2·74823
7	2·78806	2·82789	2·86772	2·90755	2·94738	2·98721	3·02703	3·06686	3·10669	3·14652
8	3·18635	3·22618	3·26601	3·30584	3·34567	3·38550	3·42533	3·46516	3·50499	3·54482
9	3·58465	3·62448	3·66430	3·70413	3·74396	3·78379	3·82362	3·86345	3·90328	3·94311
10	3·98294									

Table 15. *Cubic Metres to Cubic Feet*

1 cu. m. = 35·3148 cu. ft.

	0	1	2	3	4	5	6	7	8	9
—	—	35·315	70·630	105·944	141·260	176·574	211·889	247·204	282·518	317·833
1	353·148	388·463	423·778	459·092	494·407	529·722	565·037	600·352	635·666	670·981
2	706·296	741·611	776·926	812·240	847·555	882·870	918·185	953·500	988·814	1024·129
3	1059·444	1094·759	1130·074	1165·388	1200·703	1236·018	1271·333	1306·648	1341·962	1377·277
4	1412·592	1447·907	1483·222	1518·536	1553·851	1589·166	1624·481	1659·796	1695·110	1730·425
5	1765·740	1801·055	1836·370	1871·684	1906·999	1942·314	1977·629	2012·944	2048·258	2083·573
6	2118·888	2154·203	2189·518	2224·832	2260·147	2295·462	2330·777	2366·092	2401·406	2436·721
7	2472·036	2507·351	2542·666	2577·980	2613·295	2648·610	2683·925	2719·240	2754·554	2789·869
8	2825·184	2860·499	2895·814	2931·128	2966·443	3001·758	3037·073	3072·388	3107·702	3143·017
9	3178·332	3213·647	3248·962	3284·276	3319·591	3354·906	3390·221	3425·536	3460·850	3496·165
10	3531·480									

Table 16. *Litres to Gallons*

1 l. = 0·219976 gal.

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
—	—	0·220	0·440	0·660	0·880	1·100	1·320	1·540	1·760	1·980
1	2·200	2·420	2·640	2·860	3·080	3·300	3·520	3·740	3·960	4·180
2	4·400	4·619	4·839	5·059	5·279	5·499	5·719	5·939	6·159	6·379
3	6·599	6·819	7·039	7·259	7·479	7·699	7·919	8·139	8·359	8·579
4	8·799	9·019	9·239	9·459	9·679	9·899	10·119	10·339	10·559	10·779
5	10·999	11·219	11·439	11·659	11·879	12·099	12·319	12·539	12·759	12·979
6	13·199	13·419	13·639	13·858	14·078	14·298	14·518	14·738	14·958	15·178
7	15·398	15·618	15·838	16·058	16·278	16·498	16·718	16·938	17·158	17·378
8	17·598	17·818	18·038	18·258	18·478	18·698	18·918	19·138	19·358	19·578
9	19·798	20·018	20·238	20·458	20·678	20·898	21·118	21·338	21·558	21·778
10	21·998									

Table 17. *Kilogrammes to Pounds*

1 kg. = 2·20462 lb.

	0	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
—	—	2·205	4·409	6·614	8·818	11·023	13·228	15·432	17·637	19·842
1	22·046	24·251	26·455	28·660	30·865	33·069	35·274	37·478	39·683	41·888
2	44·092	46·297	48·502	50·706	52·911	55·115	57·320	59·525	61·729	63·934
3	66·139	68·343	70·548	72·752	74·957	77·162	79·366	81·571	83·776	85·980
4	88·185	90·389	92·594	94·799	97·003	99·208	101·413	103·617	105·822	108·026
5	110·231	112·436	114·640	116·845	119·049	121·254	123·459	125·663	127·868	130·073
6	132·277	134·482	136·686	138·891	141·096	143·300	145·505	147·710	149·914	152·119
7	154·323	156·528	158·733	160·937	163·142	165·346	167·551	169·756	171·960	174·165
8	176·370	178·574	180·779	182·983	185·188	187·393	189·597	191·802	194·007	196·211
9	198·416	200·620	202·825	205·030	207·234	209·439	211·644	213·848	216·053	218·257
10	220·462									

Table. 18. *Temperature: Equivalents of Fahrenheit and Centigrade Scales*

°F.	°C.	°F.	°C.	°F.	°C.	°F.	°C.	°F.	°C.	°F.	°C.
212	100	192	88·8	172·4	78	153	67·2	133·25	56·25	114	45·5
211	99·4	191·75	88·75	172	77·7	152·6	67	133	56·1	113	45
210·2	99	191	88·3	171·5	77·5	152	66·6	132·8	56	112	44·4
210	98·8	190·4	88	171	77·2	151·25	66·25	132	55·5	111·2	44
209·75	98·75	190	87·7	170·6	77	151	66·1	131	55	111	43·8
209	98·3	189·5	87·5	170	76·6	150·8	66	130	54·4	110·75	43·75
208·4	98	189	87·2	169·25	76·25	150	65·5	129·2	54	110	43·3
208	97·7	188·6	87	169	76·1	149	65	129	53·8	109·4	43
207·5	97·5	188	86·6	168·8	76	148	64·4	128·75	53·75	109	42·7
207	97·2	187·25	86·25	168	75·5	147·2	64	128	53·3	108·5	42·5
206·6	97	187	86·1	167	75	147	63·8	127·4	53	108	42·2
206	96·6	186·8	86	166	74·4	146·75	63·75	127	52·7	107·6	42
205·25	96·25	186	85·5	165·2	74	146	63·3	126·5	52·5	107	41·6
205	96·1	185	85	165	73·8	145·4	63	126	52·2	106·25	41·25
204·8	96	184	84·4	164·75	73·75	145	62·7	125·6	52	106	41·1
204	95·5	183·2	84	164	73·3	144·5	62·5	125	51·6	105·8	41
203	95	183	83·8	163·4	73	144	62·2	124·25	51·25	105	40·5
202	94·4	182·75	83·75	163	72·7	143·6	62	124	51·1	104	40
201·2	94	182	83·3	162·5	72·5	143	61·6	123·8	51	103	39·4
201	93·8	181·4	83	162	72·2	142·25	61·25	123	50·5	102·2	39
200·75	93·75	181	82·7	161·6	72	142	61·1	122	50	102	38·8
200	93·3	180·5	82·5	161	71·6	141·8	61	121	49·4	101·75	38·75
199·4	93	180	82·2	160·25	71·25	141	60·5	120·2	49	101	38·3
199	92·7	179·6	82	160	71·1	140	60	120	48·8	100·4	38
198·5	92·5	179	81·6	159·8	71	139	59·4	119·75	48·75	100	37·7
198	92·2	178·25	81·25	159	70·5	138·2	59	119	48·3	99·5	37·5
197·6	92	178	81·1	158	70	138	58·8	118·4	48	99	37·2
197	91·6	177·8	81	157	69·4	137·75	58·75	118	47·7	98·6	37
196·25	91·25	177	80·5	156·2	69	137	58·3	117·5	47·5	98	36·6
196	91·1	176	80	156	68·8	136·4	58	117	47·2	97·25	36·25
195·8	91	175	79·4	155·75	68·75	136	57·7	116·6	47	97	36·1
195	90·5	174·2	79	155	68·3	135·5	57·5	116	46·6	96·8	36
194	90	174	78·8	154·4	68	135	57·2	115·25	46·25	96	35·5
193	89·4	173·75	78·75	154	67·7	134·6	57	115	46·1	95	35
192·2	89	173	78·3	153·5	67·5	134	56·6	114·8	46	94	34·4

Table 18 (*continued*). *Temperature: Equivalents of Fahrenheit and Centigrade Scales*

°F.	°C.	°F.	°C.	°F.	°C.	°F.	°C.	°F.	°C.	°F.	°C.
93·2	34	73	22·7	52·25	11·25	31	− 0·5	10·4	−12	−10	−23·3
93	33·8	72·5	22·5	52	11·1	30·2	− 1	10	−12·2	−10·75	−23·75
92·75	33·75	72	22·2	51·8	11	30	− 1·1	9·5	−12·5	−11	−23·8
92	33·3	71·6	22	51	10·5	29·75	− 1·25	9	−12·7	−11·2	−24
91·4	33	71	21·6	50	10	29	− 1·6	8·6	−13	−12	−24·4
91	32·7	70·25	21·25	49	9·4	28·4	− 2	8	−13·3	−13	−25
90·5	32·5	70	21·1	48·2	9	28	− 2·2	7·25	−13·75	−14	−25·5
90	32·2	69·8	21	48	8·8	27·5	− 2·5	7	−13·8	−14·8	−26
89·6	32	69	20·5	47·75	8·75	27	− 2·7	6·8	−14	−15	−26·1
89	31·6	68	20	47	8·3	26·6	− 3	6	−14·4	−15·25	−26·25
88·25	31·25	67	19·4	46·4	8	26	− 3·3	5	−15	−16	−26·6
88	31·1	66·2	19	46	7·7	25·25	− 3·75	4	−15·5	−16·6	−27
87·8	31	66	18·8	45·5	7·5	25	− 3·8	3·2	−16	−17	−27·2
87	30·5	65·75	18·75	45	7·2	24·8	− 4	3	−16·1	−17·5	−27·5
86	30	65	18·3	44·6	7	24	− 4·4	2·75	−16·25	−18	−27·7
85	29·4	64·4	18	44	6·6	23	− 5	2	−16·6	−18·4	−28
84·2	29	64	17·7	43·25	6·25	22	− 5·5	1·4	−17	−19	−28·3
84	28·8	63·5	17·5	43	6·1	21·2	− 6	1	−17·2	−19·75	−28·75
83·75	28·75	63	17·2	42·8	6	21	− 6·1	0·5	−17·5	−20	−28·8
83	28·3	62·6	17	42	5·5	20·75	− 6·25	0	−17·7	−20·2	−29
82·4	28	62	16·6	41	5	20	− 6·6	− 0·4	−18	−21	−29·4
82	27·7	61·25	16·25	40	4·4	19·4	− 7	− 1	−18·3	−22	−30
81·5	27·5	61	16·1	39·2	4	19	− 7·2	− 1·75	−18·75	−23	−30·5
81	27·2	60·8	16	39	3·8	18·5	− 7·5	− 2	−18·8	−23·8	−31
80·6	27	60	15·5	38·75	3·75	18	− 7·7	− 2·2	−19	−24	−31·1
80	26·6	59	15	38	3·3	17·6	− 8	− 3	−19·4	−24·25	−31·25
79·25	26·25	58	14·4	37·4	3	17	− 8·3	− 4	−20	−25	−31·6
79	26·1	57·2	14	37	2·7	16·25	− 8·75	− 5	−20·5	−25·6	−32
78·8	26	57	13·8	36·5	2·5	16	− 8·8	− 5·8	−21	−26	−32·2
78	25·5	56·75	13·75	36	2·2	15·8	− 9	− 6	−21·1	−26·5	−32·5
77	25	56	13·3	35·6	2	15	− 9·4	− 6·25	−21·25	−27	−32·7
76	24·4	55·4	13	35	1·6	14	−10	− 7	−21·6	−27·4	−33
75·2	24	55	12·7	34·25	1·25	13	−10·5	− 7·6	−22	−28	−33·3
75	23·8	54·5	12·5	34	1·1	12·2	−11	− 8	−22·2	−28·75	−33·75
74·75	23·75	54	12·2	33·8	1	12	−11·1	− 8·5	−22·5	−29	−33·8
74	23·3	53·6	12	33	0·5	11·75	−11·25	− 9	−22·7	−29·2	−34
73·4	23	53	11·6	32	0	11	−11·6	− 9·4	−23	−30	−34·4

Table 19. *Pressure: Equivalents of Millibars, Millimetres of Mercury, and Inches of Mercury at 32° F. in Latitude 45°*

Mercury in.	Milli-bars	Mercury mm.	Mercury in.	Milli-bars	Mercury mm.	Mercury in.	Milli-bars	Mercury mm.	Mercury in.	Milli-bars	Mercury mm.	Mercury in.	Milli-bars	Mercury mm.
27·02	915	686·3	27·82	942	706·6	28·62	969	726·8	29·41	996	747·1	30·21	1,023	767·3
27·05	916	687·1	27·85	943	707·3	28·65	970	727·6	29·44	997	747·8	30·24	1,024	768·1
27·08	917	687·8	27·88	944	708·1	28·67	971	728·3	29·47	998	748·6	30·27	1,025	768·8
27·11	918	688·6	27·91	945	708·8	28·70	972	729·1	29·50	999	749·3	30·30	1,026	769·6
27·14	919	689·3	27·94	946	709·6	28·73	973	729·8	29·53	1,000	750·1	30·33	1,027	770·3
27·17	920	690·1	27·97	947	710·3	28·76	974	730·6	29·56	1,001	750·8	30·36	1,028	771·1
27·20	921	690·8	28·00	948	711·1	28·79	975	731·3	29·59	1,002	751·6	30·39	1,029	771·8
27·23	922	691·6	28·03	949	711·8	28·82	976	732·1	29·62	1,003	752·3	30·42	1,030	772·6
27·26	923	692·3	28·05	950	712·6	28·85	977	732·8	29·65	1,004	753·1	30·45	1,031	773·3
27·29	924	693·1	28·08	951	713·3	28·88	978	733·6	29·68	1,005	753·8	30·48	1,032	774·1
27·32	925	693·8	28·11	952	714·1	28·91	979	734·3	29·71	1,006	754·6	30·51	1,033	774·8
27·35	926	694·6	28·14	953	714·8	28·94	980	735·1	29·74	1,007	755·3	30·53	1,034	775·6
27·38	927	695·3	28·17	954	715·6	28·97	981	735·8	29·77	1,008	756·1	30·56	1,035	776·3
27·41	928	696·1	28·20	955	716·3	29·00	982	736·6	29·80	1,009	756·8	30·59	1,036	777·1
27·44	929	696·8	28·23	956	717·1	29·03	983	737·3	29·83	1,010	757·6	30·62	1,037	777·8
27·46	930	697·6	28·26	957	717·8	29·06	984	738·1	29·86	1,011	758·3	30·65	1,038	778·6
27·49	931	698·3	28·29	958	718·6	29·09	985	738·8	29·89	1,012	759·1	30·68	1,039	779·3
27·52	932	699·1	28·32	959	719·3	29·12	986	739·6	29·92	1,013	759·8	30·71	1,040	780·1
27·55	933	699·8	28·35	960	720·1	29·15	987	740·3	29·94	1,014	760·6	30·74	1,041	780·8
27·58	934	700·6	28·38	961	720·8	29·18	988	741·1	29·97	1,015	761·3	30·77	1,042	781·6
27·61	935	701·3	28·41	962	721·6	29·21	989	741·8	30·00	1,016	762·1	30·80	1,043	782·3
27·64	936	702·1	28·44	963	722·3	29·24	990	742·6	30·03	1,017	762·8	30·83	1,044	783·1
27·67	937	702·8	28·47	964	723·1	29·26	991	743·3	30·06	1,018	763·6	30·86	1,045	783·8
27·70	938	703·6	28·50	965	723·8	29·29	992	744·1	30·09	1,019	764·3	30·89	1,046	784·6
27·73	939	704·3	28·53	966	724·6	29·32	993	744·8	30·12	1,020	765·1	30·92	1,047	785·3
27·76	940	705·1	28·56	967	725·3	29·35	994	745·6	30·15	1,021	765·8	30·95	1,048	786·1
27·79	941	705·8	28·59	968	726·1	29·38	995	746·3	30·18	1,022	766·6	30·98	1,049	786·8

Table 20. *Petroleum Products. Volume per unit weight and weight per unit volume of liquid**

Sp. gravity	Volume per long ton† in				Weight in long tons‡ per			
	Cu.m.§	Imp. gal.	Amer. gal.	Amer. barrels	Cu.m.	Imp. gal.	Amer. gal.	Amer. barrels
0·650	1·57	345	414	9·9	0·638	0·00290	0·00242	0·101
0·700	1·46	320	384	9·2	0·687	0·00312	0·00260	0·109
0·750	1·36	299	359	8·5	0·736	0·00335	0·00279	0·117
0·800	1·27	280	336	8·0	0·786	0·00357	0·00297	0·125
0·850	1·20	264	317	7·5	0·835	0·00379	0·00316	0·133
0·900	1·13	249	299	7·1	0·884	0·00402	0·00335	0·141
0·950	1·07	236	283	6·7	0·933	0·00424	0·00353	0·148
1·000	1·02	224	269	6·4	0·982	0·00447	0·00372	0·156

* The figures in this table are only approximate.
† To obtain volume per metric ton multiply figures in table by 0·98421.
‡ To obtain weights in metric tons multiply figures in table by 1·01605.
§ 1 cu.m. = 10 hectolitres (approximate).

The specific gravity of a product must be known in order to calculate accurately equivalent weights and volumes from the above table. The following table shows how widely the specific gravities of crude oils and commercial petroleum products may vary, and will indicate the degree of error involved in assumption of approximate specific gravity figures.

Product	Specific gravity range	Product	Specific gravity range
Crude oils	0·800–0·970	Diesel oils	0·820–0·920
Aviation gasolines	0·700–0·780	Lubricating oils	0·850–0·950
Motor gasolines	0·710–0·790	Fuel oils	0·920–0·990
Kerosines	0·780–0·840	Asphaltic bitumens	1·000–1·100
Gas oils	0·820–0·900		

Thus, if the specific gravity of a crude oil is assumed to be 0·850, a production of 10,000 long tons is equivalent to

7·5 × 10,000 = 75,000 American barrels;

whereas, if its true specific gravity is 0·950, the production is only 67,000 American barrels.

INDEX

Abatesco, R., 23, 47, 205
Abra, Pont d', 203
Administration, educational, 3, 117–18; military, 3; political, 1–3; public health, 75–6; religious, 3, 116
Aëdes aegypti, 80
Aero-radio stations, 157
Africa, French North, trade with, 177; *see also* Algeria, Tunis
Africans, French North, in Corsica, 108
'Agglomerated population', definition of, 96
Aghione, 156
Aghiti, R., 152
Aglio, Pte d', 171 (fig.)
Agnello, Pte d', 29 (plate)
Agostino, 136 (fig.)
Agriates, 8, 23, 36, 101, 147, 148
Agriculture, 119–28; in 18th cent., 91; holdings, 120; implements, 121; labour, 119–20; land utilization, 119; livestock, 125–8; products, 122–5
Agrumi, 124
Air base, naval (Ajaccio), 160, 170, 171 (plate)
Air services, 140 (and fig.), 171
'Air Union', 140
Aïtone, Forêt de, 68, 69 (fig.), 72 (plate), 74 (plate)
Aix-en-Provence, 3, 117
Aix-la-Chapelle, Treaty of, 91
Ajaccio, administrative functions, 1, 2 (fig.), 3, 74, 192, 193; agriculture near, 120–1, 124; air services, 140, 172; berthing facilities at port, 168; buildings, 110, 114 (plate); *citadelle*, 110, 168 (fig.); climate, 55, 58 (table), 59, 62 (fig.), 64; coastal services, 139–40, 171; dairies, 127; demilitarization (1942), 93; electrical power, 131–3, 134 (fig.); fishing, 128–9, 170 (and plate); gas-works, 130; growth, 104 (fig.), 106, 170; history, 87, 170; industries, 129–30; lifeboat station, 49; maps, 187–92 *passim*; maritime connexions, 139–40 (and fig.), 172; naval base, 44 (plate), 160, 170; oil storage, 168 (fig.); passenger traffic at port, 172; population, 95–108 (*passim*), 166, 170, 194; port, 13 (fig.), 29, 32 (fig.), 41, 159, 166–72, 166 (plate), 169 (fig.), 170 (plates), 171 (plates); post-auto services (1939), 146 (fig.); public health administration, 75; railway, 149, 150 (fig.), 152, 170; roads, 145, 146 (fig.), 147, 196–201 *passim*, 203–5 *passim*; rocket-throwing apparatus, 49; sanitation, 82; shipping, 176–8 (and tables); signal communications, 156–7; situation, 13 (fig.), 31 (fig.), 166; storage accommodation at port, 168; tourist resort, 138, 170; town-planning, 170; trade, 176–8; water supply, 20, 81, 139 (plate), 168
Ajaccio, arrondissement, administration, 1–3; area, 1; cantons in, 1, 193; communes in, 1, 196; dispersed population, 98, 99 (fig.); population, 95, 106, 193; telegraphic facilities, 157; telephonic facilities, 157; water supply, 81
Ajaccio, canton, 193
Ajaccio, Golfe d', 4 (plate), 13 (fig.), 28 (fig.), 38, 41 (and plate), 44 (plate), 45 (plate), 129, 140, 152, 166, 169 (fig.), 198
Ajara, 133
Alalia, 84, 86
Alando, lord of (11th cent.), 88
Albano tunnel, 155 (fig.)
Albertacce, 194; proposed reservoir, 133
Albitreccia, 203
Albitrina, Bocca, 203
Albo, Marine d', 16 (fig.), 32 (plate), 34, 128 (plate), 139 (plate), 207
Alciolo, Pte de l', 36
Alder, 71, 73
Aléria, 79, 86, 128; roads, 47, 142 (fig.), 147, 204–6 *passim*
Aléria, Piana d', region of, 23
Aléria, Plain of, 15, 46
Alesani, R., 18, 19 (fig.), 22, 46, 47, 48, 205
Alesani, Val d', canton, 193
Alesani, valley, 112; mines, 136 (fig.)
Algajola, 37, 205; quarries, 136 (fig.), 137
Algajola, Baie de, 37, 205
Algeria, imports from, of wheat, 121; of wine, 123, 178
Aliso, Golfe d', 16 (fig.), 34
Aliso, R., 23, 32 (plate), 35, 36, 163 (fig.), 205
Alistro, 47, 205; rainfall at, 62 (fig.)

Alistro lighthouse, 32 (fig.)
Alistro, R., 205
Almanac, Nautical, 158
Almanacco Popolare di Corsica, 93
Almonds, 124
Alnus suaveolens, 73; *see also* Alder
Alpine region, climate of, 66
Alpine vegetation, 73–4
Alps (European), 4, 12
Altitudinal climatic zones, 66
Altitudinal distribution of population, 101–3 (and fig.)
Altitudinal vegetation zones, 68–72
Alto, Fium', 19 (fig.), 46, 47, 48, 205
America, South, emigration to, 105
Anarchy, feudal, 88
Anchorages, 26–9, 32 (fig.), 196–201; *see also* Mouillage
Anchovy, 128
Ancien Port (at Bastia), 161 (fig.)
Anfarti, 116
Ankylostomiasis, 81
Annu Corsu, l', 116
Anopheles mosquitoes, 78–9; *A. maculipennis*, 79; *A. superpictus*, 79
Anse, *see under* proper name
Antibes, telegraphic communication with, 156–7
Antimony, mines of, 136 (fig.)
Apparatus, rocket throwing, 49
Appeal, Court of, 3
Appietto, 204
Apricots, 70, 124
Arabic words in Corsican dialect, 116
Aragon, 84, 87 (fig.); war with Pisa (1325), 88; war with Genoa (*c.* 1420), 99
Araso, Étang d', 45
Arbellara, 199, 203, 206
Arbitro, Cala d', 42
Arbutus, 72
Arca, 113
Architecture, 109–13
Archipelago, *see under* proper name
Arco, Mouillage de Pte d', 32 (fig.), 48, 201
Arco, Pointe d', 161
Arco, Tour d', 201
Area, of island, 1; of arrondissements, 1; of communes, 3
Arena, 205
Arena, R., 205
Arenalla, Calanque de l', 173 (fig.)
Aresia, Col d', 205
Argentella, mines, 136 (fig.), 137
Argento, Lac d', 74
Arguista, 203
Army Area, 15th, 3
Arrondissements, list of, 1 (table), 193; *see also under* proper names
Arsenic, mines of, 135–7 (and fig.)
Artica, Punte, 14
Artichokes, globe, 122
Asbestos, mines of, 136 (fig.)
Ascaris lumbricoides, 81
Asco, 91 (plate); roads, 206
Asco, R., 19 (fig.), 22, 23
Asco valley, 8 (and plate), 91 (plate), 202
Asparagus, 122
Aspreto, Col d', 203
Aspreto, Mouillage d', 168, 169 (fig.)
Aspreto, Pte d', 169 (fig.)
Aspreto, seaplane base, 157, 160, 170, 171 (plate)
Aspreto tunnel, 152
Assembly, General (of 1770), 91
Asses, 128
Astra, Col d', 202
Aullène, 142 (fig.), 143, 146 (fig.), 203, 206; population, 194
Austria, war with France (1553), 90
Austrian Succession, war of, 90
Autonomist movement, 92–3
Avalanches, 65, 68, 145
Avant-port (at Bastia), 114 (plate), 159 (plate), 161 (fig.), 162
Avapessa, 206
Avartoli, Col d', 202

Baccalauréat examinations, 118
Baie, *see under* proper name
Balagne, 23; agriculture, 120, 121, 124, 126; population, 98, 103; roads, 147; vegetation, 70
Balance of trade, 179–80
Balistra, R., 45
Balles de coton, 60
Balley, M. (prefect, 1942), 94, 138
Banc, *see under* proper name
Banda di Dentro, 101
Banda di Fuori, 101
Banditry, 115
Baraci, mineral springs, 129, 136 (fig.)
Baraci, Pont de, 203
Baraci, R., 41
Baracone, 203
Barbary pirates, 98
Barbicaja, 124, 125
Barcaggio, Marine de, 29 (plate), 34
Barchetta, 129, 130, 204
Barley, 122
Barracoun, 109
Barrage (across R. Gravone), 139 (plate)
Bartoli, 115
Baskets, manufacture of, 129.

Basques, 114

Bassa, Bocca, 205

Basse ville (Bastia), 110; (Corte), 110 (fig.)

Bastelica, 96, 194; roads, 204

Bastelica, canton, 193

Bastia, administrative functions, 1, 2 (fig.), 3; berthing facilities at port, 162; buildings, 110, 113 (fig.), 114 (plate); *citadelle*, 17 (plate); climate, 59, 62 (fig.); coastal services, 139; dairies, 127; drainage, 46; electrical power, 131–2, 134 (fig.); fishing, 128; gas-works, 130; growth, 106; history, 89, 91, 92, 94; industries, 129–30; Italian occupation (1942), 94; lifeboat station, 49; maps, 187–92; maritime connexions, 139, 140 (fig.); population, 96, 98, 101, 102 (fig.), 103, 104 (fig.), 106, 194; port, 29, 31, 32 (fig.), 159, 158 (plates), 159 (plates), 160–2 (and fig.), 196; position, 160–1, 162; post-auto services, 146 (fig.); public health administration, 75; railway, 43, 47, 48, 149, 150 (fig.), 155–6, 162, 166, 196; roads, 36, 37, 47, 142 (fig.), 145 (and plate), 147, 162, 163, 164 (fig.), 166, 170, 196, 204, 205, 207; rocket-throwing apparatus, 49; sanitation, 82; shipping, 176–9; signal communications, 157; situation, 160–1, 162; storage accommodation at port, 162; trade, 176–8; water-supply, 81, 162

Bastia, arrondissement, area, 1; cantons in, 1, 193; communes in, 1, 196; dispersed population, 98, 99 (fig.); population, 95, 106, 193; telegraphic facilities, 157; telephonic facilities, 157; water supply, 81

Bastia, canton, 193

Bastia-Terranova, 96, 193

Bastia-Terravecchia, 96, 193

Batterie, Pt de la, 198

Bavella, Chaîne des Aiguilles de, 44

Bavella, Col de, 71 (fig.), 201

Bavella, Forêt de, 71 (fig.)

Beans, 122

'Beauté, Ile de', 139, 140

Beech, 66 (plate), 71, 72, 128

Belgians in Corsica (1931), 108

Belgodère, 194; railway, 37, 150 (fig.), 154; roads, 142 (fig.), 147, 197, 206

Belvedère, 109, 203

Benedetto, Banc, 174, 175 (fig.)

Berberis, 73

Berbers, 114

Bergeries, 109

Bevinco, Pont de, 204

Bevinco, quarries, 204

Bevinco, R., 204

Bianchetti, 129

Bianca, Col de, 202

Bianca, Pte, 38, 167 (fig.)

Bianco, Capo (headland), 16 (fig.), 28 (fig.), 34

Bianco, Capo (mountain), 14

Bicchisano, 203; *see also* Petreto-Bicchisano

Biguglia, Étang de, 17 (fig. and plate), 18 (fig.), 28 (fig.), 156, 204; dimensions of, 48; oysters from, 128–9

Biotite granite, 8–14 *passim*

Birds, 74

Birth-rate, 76 (and table), 103–5

Bisinchi, mines, 136 (fig.)

Bismoni viaduct, 155 (fig.)

Blackbirds, 74

Black Death in Corsica (1350), 89

Blanc, Cap, 200

Bocca, *see under* proper name

Bocognano, 194; railway, 150 (fig.), 152; roads, 142 (fig.), 204

Bocognano, canton, 193

Bonaparte, family, 91

Bonapinetta, projected hydro-electrical station, 133

Bône, maritime connexions with Corsica, 140 (fig.)

Boniface, Count (828), 86

Boniface VIII, Pope, 88

Bonifacio, administrative functions, 193; berthing facilities at port, 173–4, 179 (plate); buildings, 110, 111, 171; *citadelle*, 90 (plate), 111, 171, 173; cliffs, 8, 42, 43 (fig.), 45 (plate), 48 (plates); climate, 64; coastal services, 139–40; dialect, 116; electrical power, 134 (fig.); fishing, 128; grottoes near, 42–3, 48 (plate); history, 86, 88, 89, 114; industries, 129; lifeboat station, 49; maps, 187–92; maritime connexions, 139–40 (and fig.); population, 172, 194; port, 32 (fig.), 159, 172–4, 173 (fig.), 178 (plate), 179 (plate), 200; post-auto services, 146 (fig.); railway (projected), 43, 149, 150 (fig.), 156; roads, 42, 43, 145, 146 (fig.), 147, 173 (fig.), 174, 200, 203, 205, 206; rocket-throwing apparatus, 49; shipping, 176–9; signal communications, 156–7; situation, 172; trade, 176–8; water supply, 174

Bonifacio, Baie de, 42, 45 (plate), 178 (plate)

Bonifacio, canton, 193

Bonifacio, Straits of, 1, 6, 10 (fig.), 26, 44, 53, 57, 172, 173 (fig.)
Bonifatto, 205
Bora, 56 (fig.)
Boracci, R., 171 (fig.)
Borgo, 204
Borgo, canton, 193
Botticella, 207 (table)
Bouc, Port-de-, trade with Corsica, 179
Bourses nationales, 117
Brando, 194; roads, 207
Brando, canton, 106, 193
Bravone, railway, 156
Bravone, R., 19 (fig.), 22, 47, 147, 205
Breezes, land and sea, 55
Briançonnais zone, 4
Bridges, 141–156 *passim*, 148 (plates)
Brigands, 115
Brine beds, 137
British squadron off Corsica (1747), 91; (1794), 91–2
Broccio, 126
Bronchitis, 77
Brouche, see *Broccio*
Brucellosis, 80
Building stone, 137, 178
Buzzard, 74
Byzantine Empire, 84, 85 (fig.), 86

Cabanes, 109
Cables, telegraphic, 156–7
Cagliari (Sardinia), climate, 61
Cagna, Montagne de, 42
Cagnano, 207
Cala, 87, *see also under* proper name
Calacuccia, 110 (plate); climate, 64; history, 87; population, 194
Calacuccia, canton, 193
Calanches, *see* Calanques
Calanque, *see under* proper name
Calanques (de Piana), 11, 36 (plate), 144 (plate)
Calas, 29, 41; *see also under* proper name
Calasima, 87
Caldane, 129
Caldaniccia, 136 (fig.)
Caldano, Pte de, 37
Calenzana, 194; roads, 37, 142, 197, 205; sanitation, 82; signal communications, 156
Calenzana, canton, 193
Calvi, administrative function, 193; berthing facilities at port, 166; *citadelle*, 36 (plate), 90 (plate), 111; coastal services, 139–40; dairies, 127; electrical power, 134; fishing, 128; history, 89, 91; industries, 129; malaria, 79; maritime connexions, 139–40 (fig.); population, 194; port, 29, 32 (fig.), 37, 159, 162 (plate), 166 (and plate), 167 (fig.), 197; post-auto services, 146 (fig.); railway, 37–8, 149 (and plates), 150 (fig.), 151, 153–5, 163, 198; roads, 37, 142 (fig.), 147, 163, 198, 204, 205, 206; rocket throwing apparatus, 49; shipping, 176–9; situation, 36 (plate); trade, 176–9; vineyards near, 123
Calvi, arrondissement (suppressed in 1926), 1
Calvi, canton, 193
Calvi, Golfe de, 28 (fig.), 33 (plate), 35, 36 (and plate), 37, 155, 166, 167 (fig.)
Calzarello, 205
Camera, 207
Campile, 194
Campile, canton, 193
Campitello, canton, 193
Campo dell' Oro, *see* Oro, Campo dell'
Campodiloro, *see* Oro, Campo dell'
Canale di Verde, gasworks, 130
Canari, wines, 123
Cancer, 77
Campo Moro, Mouillage de, 32 (fig.), 199, 203
Campo Moro, Pte de, 41, 171 (fig.)
Canelle, Pte di, 16 (fig.), 28 (fig.), 34
Cannes, Mouillage des (Ajaccio), 168, 169 (fig.), 170
Cantons, list of, 193 (table)
Cap, *see under* proper name
Capella, Punta della, 14
Capello, plateau of, 45 (plate)
Capicciolo, Pte, 10 (fig.), 44, 45
Capinero, Cala di, 42
Capo, *see under* proper name
Caporalino, 204
Capraja, Ile di, 26
'Capture', river, 20–21 (and fig.)
Capucins, Jetée des (Ajaccio), 168, 169 (fig.), 170
Capucins, Mouillage des (Ajaccio), 168, 169 (fig.)
Carazzi, Col de, 204
Carazzi, Pont de, 204
Carbiniccio, 204
Carbonari, 109, 130
Carbuccia, 204
Cardo, Mt, 14
Cardo, quarries, 136 (fig.), 137
Cargèse, 40 (plate); Greeks at, 114, 116; roads, 142 (fig.), 146 (fig.), 147, 204; wines, 123
Cargèse, Baie de, 40 (plate)
Cargèse, Pte de, 40
Cargiaca, 206

Cargo traffic, *see* Trade
Carp, 74
Cartagena, 61
Carthaginians, 86
Cartography, 186–92
Casaglione, 204
Casalabriva, 203
Casaluna, R., 22, 23
Casamozza, 14, 22; projected hydro-electrical station, 133; railway, 48, 149, 150 (fig.), 151–6 *passim*; roads, 142, 145–8 *passim*, 146 (fig.), 204, 205
Casanova, 207
Casaroni, 109
Casevecchia, 196
Casinca, 23
Casinca, La, 124
Cassano, 130
Casta, 205
Castagna, Pte della, 13, 40
Castagniccia, *see Chataigneraie*
Castelluccio, agriculture near, 121, 126
Castelluccio, Col de, 202
Castifao, canton, 106, 193
Castiglione, water supply of, 81
Castirla, 204
Cateau-Cambrésis, Treaty of, 90
Caténa, Calanque de la, 173 (fig.)
Catena, projected hydro-electrical station, 133
Cateraggio, 205, 206
Catholicism, *see* Roman Catholic Church
Cattle, 127
Cauliflowers, 122
Cauro, 194; roads, 145, 198, 203, 204; wines, 123
Causeway (at Ile-Rousse), 163 (plate)
Cavallo, Cap al, 38
Cavallo, Ile de, 10 (fig.), 28 (fig.), 44, 173 (fig.); area, 1
Caves, 42–3
Caviglioli, 115
Cavo, R., 19 (fig.), 46, 202, 205
Cédrats, see Citrons
Celaccia, Col de, 145, 203
Celle, 207
Cemeteries, 113
Central European time, 158
'Central Furrow', 6, 16 (plate), 21, 22, 61, 110 (plate), 147, 152
Centuri, 160, 196; roads, 207; wines, 123
Centuri, Baie de, 32 (fig.), 34, 196
Centuri, Haut-fond de, 34
Centuri, Ile de, 16 (fig.), 34, 196
Cerbicale, Pte, 200
Cerbicales, Iles, 45, 200
Cereals, 122
Cervione, 194; roads, 48, 146 (fig.), 205; wines of, 123
Cervione, canton, 193
Cervus corsicanus, 74
Chaîne, *see under* proper name
Chalybeate springs, 137
Chapels, 113
Characteristics, physical, of people, 114; moral, of people, 114–15
Charcoal, 68, 109, 130, 141, 178 (plate); *see also Carbonari*
Charlemagne, 86; Empire of, 85 (fig.)
Charles VI of France, 89
Chataigneraie, 23; climate, 61; economy of, 125; population, 102 (fig.), 103; roads, 147–8; settlements, 48, 98, 101; topography, 15; woods, 69 (fig.), 71; *see also* Chestnuts
Cheese, 126–7, 129
Chemins départementaux, 141
Chemins vicinaux ordinaires, 141
Chemists, 75
Cherries, 124
Chestnuts, 70, 71, 112, 115 (plate), 125, 129 (plate)
Chiappa, lighthouse, 32 (fig.), 49
Chiappa, Pte de, 45, 174, 175 (fig.)
Chiatra, mines, 136 (fig.)
Chiavari, Port de, 203
Chili, 56 (fig.)
Chioni, R., 204
Ciarnente, Col de, 202
Cigarettes, 129
Cigars, 129
Cinarca, 25
Cinarca, Count of (1020), 88
Cinto, Mt, 4, 9 (plate), 12, 14, 74, 110 (plate), 187
'Circonscriptions Sanitaires', 74
Cirques, 12
Cismontan dialect, 116
Cistus, 72
Citadelle, 111; at Ajaccio, 110, 114 (plate), 167 (plate), 168 (fig.), 170 (plate); at Aléria, 111; at Bastia, 17 (plate), 111, 158 (plate), 161 (fig.); at Bonifacio, 90 (plate), 111, 172, 173, 178 (plate), 179 (plate); at Calvi, 36 (plate), 90 (plate), 111, 162 (plate), 166 (and plate), 167 (fig.); at Corte, 91 (plate), 110 (fig.), 111
Citadelle, Jetée de la (Ajaccio), 167 (plate), 168, 169 (fig.), 170 (and plate), 171 (plate)
Cité primitive, 110
Citrons, 124, 129, 179
Citrus fruits, 70, 124–5
Ciuntrone, Capo al, 9 (plate)

Ciuttone, Pte de, 38
Civitavecchia, 139
Clemenceau, G., and anti-malarial enquiry, 79
Climate, 50–66; altitudinal zones, 66; breezes, land, 55; breezes, sea, 55; clouds, 60; effect on agriculture, 119, 124; effect on communications, 145; effect on health, 68; effect on vegetation, 67; gales, 53–5; local winds, 55, 56 (and fig.), 57; rainfall, 20, 61–5 (and figs.); snowfall, 65; temperature, 58–9; thunderstorms, 64; visibility, 60; winds, 51–8 (and figs.)
See also Alpine region, Avalanches, *Balles de coton*, Depressions, Fog, *Gregale*, Hail, Haze, Inversion of temperature, *Levante*, *Libeccio*, *Maestrale*, *Mistral*, *Muntese*, *Ponente*, *Raggiature*, *Scirocco*, Snow-cover, Sunshine, *Tramontana*
Clouds, 60
Clovis, 129
Coal, consumption, 131; imports, 131, 178; occurrence, 6, 136 (fig.); output, 130–1, 135
Coastal services, 139–40
Coastal shipping, *see* Shipping
Coasts, 26–49; Cap Corse, 32–5; East, 46–8; North-west, 35–8; South-east, 44–6; South-west, 41–3; West, 38–41
Codi, R., hydro-electrical station near, 131, 133
Coggia, 204
Col, 202 (table), *see also under* proper name
Columbara, Mouillage de, 32 (fig.), 45, 200
Commerce, 176–80; medieval, 88
'Commission Administrative', 94
'Commission Sanitaire', 75
'Committee, Corso-Dalmatia', 93
Communes, list of, 194–5 (table)
Communications, 139–58; air, 140; near coast, 29, 32–49 *passim*, 196–201; maritime, 139–40, 158–79 *passim*; post-auto, 145–6 (and fig.); railways, 148–56; roads, 141–8, 202, 203–7; signal communications, 156–7; telpherways, 141
'Compagnie de Navigation Fraissinet', 138, 139–40, 159, 180
'Compagnie des Chemins de Fer Départementaux', 149
'Compagnie Florio', 139
'Compagnie Générale Transatlantique', 139
'Compagnies Réunis de Gaz et l'Électricité', 131, 133, 134 (fig.)
Conca, population, 194; roads, 205
Conduit (to Ajaccio), 81, 139 (plate)
Conglomerates, 15, 18
'Congregation y Propaganda Fide et Rome', 116
Conjunctivitis, 80
Connexions, maritime, 139–40 (and fig.)
'Conseil départemental d'Hygiène', 75
'Conseil supérieur d'Hygiène publique', 75
'Conservation forestière', 3
Copabia, Cala di, 13 (fig.)
Copper, mines of, 135–7 (and fig.)
Coq de mer, 129
Coral, 129
Coralli, Col de, 203
Corbara, 205
Cork, 70, 128 (plate), 129, 174, 176, 179
Cork oak, 68, 70 (fig.)
Corno di Becco, Pta, 16 (fig.), 34
Corona, Mt, 14
Corsairs, Moorish, 89
Corse, Cap, agriculture, 123–4; anchorages, 196; cattle, 127; climate, 53, 54 (fig.), 56, 58, 60–5 *passim*; coastal services, 139; coasts, 28 (fig.), 29 (and plate), 32 (plate), 31–5; fishing, 128 (plate); geology, 14–15, 16 (fig.); lighthouse, 29 (plate), 49; maps, 187–92; population, 101, 103, 105; relief, 14–15, 16 (plate), 23; rivers, 18, 21; roads, 33–5, 145 (plate), 147–8, 205, 207; trigonometrical station, 187
'Corso-Dalmatia Committee', 93
Corsigliese, 206
Corte, administrative function, 1, 2 (fig.); agriculture near, 123, 129; buildings, 109, 110 (fig.), 113 (fig.); *citadelle*, 91 (plate), 110 (fig.), 111; climate, 61, 62 (fig.); dairies, 127; electrical power, 132, 133, 134 (fig.); history, 110 (fig.); industries, 129; malaria, 79; maps, 187–92; mines, 136 (fig.); population, 96, 194; post-auto services, 146 (fig.); public health administration, 75; quarries, 136 (fig.), 137; railway, 149 (and plate), 150 (fig.), 152; roads, 41, 47, 142 (fig.), 145, 147, 148 (plate), 198, 203–6; signal communications, 157; situation, 22; water supply, 81
Corte, arrondissement, area, 1; cantons in, 1, 193; communes in, 1, 196; dispersed population, 98, 99 (fig.); population, 95, 106, 193; telegraphic facilities, 157; telephonic facilities, 157; water supply, 81
Corte, canton, 193

Coscia, Pte de la, 28 (plate), 34
Coscione, Mt, 72; R., 133
Costione, R., 206
Cozzano, 194; roads, 206
Cravani, B. de, 38
Crete, 68
Crêtes, 8, 22
Crocce, 207
Croix, Col de la, 205
Cruzzini, R., 19 (fig.), 20, 21 (and fig.), 25
Cruzzini, valley, 202
Cuccia, projected hydro-electrical station, 133
Cultivation, *see* Agriculture
Curza, Pte de, 35, 36
Cutlery, manufacture, 130
Cuttoli-Corticchiato, 194
Czechs, in Corsica (1931), 108

Dairies, commercial, 127
Daladier, E., 93
Damascus, 130
Darlan, Admiral, 138
Date-palms, 70
Death, causes of, 77–8
Death-rate, 76–7 (table), 103, 105
Deer, 74
Deltas, 16, 22, 35, 38, 40, 41, 45, 46, 98, 174–5; *see also* proper names
Demilitarization of Ajaccio (1940), 93
Dengue, 80
Dental Surgeons, 75
Dente, Capo al, 12 (plate)
Depopulation, rural, 106–8
'Dépôt de la Guerre', 187
Depressions, atmospheric, 51–3, 64–5
Depths, off coast, 26, 27 (fig.)
Deputies, 3
Derrick, floating, 37 (plate)
Dialects, Corsican, 116; Genoese, 116; Italian, 116
Diamant, Place du (Ajaccio), 110, 203, 204
Diane, Étang de, 28 (fig.), 47
Diarrhœa, 80
Digestive system, diseases of, 77
Diorite, 11, 13, 16, 17 (fig.)
Diphtheria, 77
Diseases, 77, 78–81
'Dispersed population', definition of, 96
Distance of Corsica from mainland, 1
Divisions, regional, 23–5; administrative 2 (fig.), 193 (table)
Doctors, 75
Dolmen, 84
Dragonetta cavern, 43, 48 (plate)
Drainage (artificial), 46, 70, 74
Drainage (natural), *see under* Rivers
Dunkirk, trade with, 178
Dysentery, 80

East Roman Empire, *see* Byzantine Empire
'Eaux et Forêts, Administration des', 3
Eccica, 203
Eccica, Ile d', 42
Eccica, Palo d', 42
Eccica, Pte d', 28 (fig.), 29, 41, 42, 171 (fig.)
'Écoles maternelles', 117 (table)
'Écoles normales primaires', 118 (table)
'Écoles primaires élémentaires', 117 (table)
'Écoles primaires supérieures', 117 (table)
Economic Region, 11th, 3
Education, 117–18
Eels, 74
Elba, island of, 26
Elbe, Golfe d', 39
'Électricité de la Corse, Société d'', 134 (fig.)
Electricity, 131–5; hydro-, 131–2; thermal-, 131; projects, 132–5
'Électrique Rurale, l'Union', 133, 134 (fig.)
'Électro-Groupement', 133
Elliott, Sir Gilbert (1794–6), 92
Emigration from Corsica, 105
Enciclopedia Italiana, 92
England, occupation of Corsica by (1747, 1794), 91–2; withdrawal, 92
English, in Corsica (1931), 108
Enteric fevers, 80
Enteritis, 80
Erbalunga, 207
Erco, R., 9 (plate), 12
Erosion, marine, 26–49 *passim*; weathering, 8–11; river, 11–12, 18–22; glaciation, 12
Ersa, 33, 34; mines, 136 (fig.)
Estremo, Monte, 205
Étang, *see under* proper name
Étangs, 18, 26
Etruscans, 86
Eucalypts, 45 (plate), 46, 70, 74
Euproctus montanus, 74
Europe, distance from Corsica, 1
Evisa, 8 (plate), 37 (plate); post-auto services, 146 (fig.); roads, 40, 142 (fig.), 197, 198, 204, 205
Evisa, canton, 193
Evolution, structural, 4–6
Exarchate of Africa, 86

Exports, invisible, 180
Extrusive rocks, 8
Eye diseases, 80

Factories, 129
Falcone, Pte (Sardinia), 44
Fallow, area of (1937), 126
Fango, R., 19 (fig.), 21, 39, 205
Fango, valley, 202
Farinole, mines, 136 (fig.); roads, 207; wine, 123
Faults, 8, 14
Fauna, 74
Favone, 205
Favone, R., 205
Features, racial, 113–15
Feliceto, 206
Feno, Cap de, 13 (fig.), 28 (fig.), 40, 168 (fig.)
Feno, Capo di, 10 (fig.), 28 (fig.), 42, 173 (fig.)
Ferrière, 129
Ferruginous springs, 137
Feudalism, 88; abolition of, 91
Fevers, enteric, 80; undulant, 80
Ficajola, 39
Ficarella, R., 21, 35, 37, 202
Figareto, 205
Figari, 194
Figari, canton, 194
Figari, Golfe de, 32 (fig.), 42, 145, 156, 199
Figari, Pont de, 203
Figari, Tour de, 199
Finocchiarola, Iles de, 16 (fig.), 28 (plate), 34
Fish, 74
Fishing, 128 (plate), 128–9, 170 (plate)
Fiume, *see under* proper name
Fiumicicali, 206
Fiuminale, R., 35, 163 (fig.)
Fleet, British, 91–2; French, 44 (plate)
Flora, 67–74
Foca, *see under* proper name
Fodder crops, 122
Fog, 60
Fog signals (radio), 49
Foggiale, Col de, 13 (plate)
Folelli, 129, 151, 156, 205
Fontanaccia, 84
Forcina, Col de, 206
Forcina, Pont de, 206
Forciolo, 129
Foreign population, 95, 108–9
Foreign trade, *see* Trade
Forests, 68–72 (and figs.); *see also under* proper name
Forêt, *see under* proper name
Fornali, Pte de, 36, 197
Fornali, Rade de, 163 (fig.), 164, 197
Fornello, Cala di, 42
Forticaccio, R., 133
Fozzaninco, 206
Fozzano, 203
'Fraissinet, Compagnie de Navigation', 138, 139–40, 159, 180
Francardo, 22; post-auto services, 146 (fig.); roads, 142 (fig.), 204
Francardo, Pont de, 152
France, captured Corsica (1556), 89–90; returned Corsica to Genoa (1559), 90; captured Corsica (1737), 90; withdrawal (1741), 90–1; occupation of Corsican ports (1747), 91; purchase of Corsica from Genoa (1768), 91, 87 (fig.); defeat of Corsicans (1769), 91; war with England (1792–1815), 91–2; relations with Italy (1918–39), 92–4; trade with Corsica (1937), 177–9; armistice with Italy (1940), 93; Vichy regime, 94
Franks, 84; empire of, 85 (fig.); *see also* Charlemagne
Frequency, of rain, 63–4; of winds, 54 (fig.)
Fruit, 78, 119, 121, 123–5, 179; *see also under* proper names
Fuel, 73, 130–1; *see also* Charcoal, Coal, Gas, *Maquis*
Funeral procession, 111 (plate)

Gabbro, 6, 11, 14, 15, 16 (fig. and plate), 17 (fig.)
Galère, La, 37
Galéria, 38–9; roads, 198–205
Galéria, Golfe de, 28 (fig.), 32 (fig.), 38, 39, 147, 197
Galéria, Tour de, 197
Gales, 53–5
Gargalo, Ile, 39
Garlic, 122
Garrigue, 73 (and plate)
Gas, 130
'Général Bonaparte', 29 (plate)
Genice, projected hydro-electrical station, 133
Genista, 72 (plate), 73, 74
Genoa, Gulf of, 51, 57
Genoa, relations with Corsica, 87 (fig.), 88–91; maritime connexions, 139, 140 (fig.)
Genoese dialect, 116
Genseric (A.D. 469), 86
Geology, 4–20 *passim*

Germans, mercenaries (1729), 90; in Corsica (1931), 108; entry into unoccupied France (1942), 94
Gers, department of, 132
Ghisonaccia, population, 194; railway, 149; roads, 142 (fig.), 204, 205, 206
Ghisoni, electrical power, 132–3; population, 194; post-auto services, 146 (fig.); roads, 142, 143, 147, 204, 205, 206
Ghisoni, canton, 193
Ghisoni, Forêt de, 68, 69 (fig.)
Giottani, Marine de, 16 (fig.), 207
Giovacchini, Petru, 93
Giraglia, Ile de la, 16, 28, 29 (plate), 34
Giraglia, lighthouse, 32 (fig.), 49
Girolata, Golfe de, 32 (fig.), 39, 198
Girolata, Tour de, 198
Glaciation, Quaternary, 12
Glaciers, former, 12
Gneiss, 11, 16
Goats, 73, 127, 129 (plate)
Golf-course, 138 (plate)
Golfe, *see under* proper name
Golo, R., 9 (plate), 14, 17 (fig.), 18, 19 (fig.), 21, 22, 23, 46, 47, 48, 110 (plate), 145, 147, 148 (plate), 204, 205; delta of, 17 (fig.), 22; hydro-electrical installations near, 132–3; malaria near, 79
Golo, valley, 12, 13 (plate), 14, 40, 66 (plate), 145, 152–3
Gorgona, Ile, 26
Goths, relations with Corsica, 84, 86
Gozzi, quarries, 137
Gradients, railway, 152–6 *passim*; road, 141, 143
Graduggine, Étang de, 47
Granace, 206
Granato, Pont de, 152
Grandval, Boulevard (Ajaccio), 110
Granite, 6–14 *passim*, 7 (fig.), 10 (fig.), 13 (fig.), 12 (plate), 72 (plate), 111 (plate), 114 (plate), 144 (plate); quarries, 137; road-metal, 141
'Granulite', 8–14 *passim*
Gravone, R., 18, 19 (fig.), 20, 21, 41, 81, 139 (plate), 166, 203, 204; water supply, 20, 81, 139 (plate)
Gravone, valley, 41, 63, 98, 124, 145, 148, 152, 202
Great Britain, trade with, 177
Greek, early settlements in Corsica, 84–6; at Cargèse, 40, 114, 116; language in Corsica, 116; Orthodox religion in Corsica, 116
Gregale, 55, 56
Gregory VII, Pope, grants Corsica to Pisa (1077), 88
Gresso, 114
Grosseto, 203
Grottes de Bonifacio, 48 (plate)
'Gruppi di Azione Irredentista Corsa', 93
Guadelle, R., 36
Guagnerola, Col de, 13 (plate), 202
Guagno, mineral springs, 129, 136 (fig.), 137; population, 194
Guanches, 114
Guargale, 129
Guincheto, 203
Guitera, mineral springs, 136 (fig.), 137; roads, 203, 206
Guiterce, 129

Haemorrhage, cerebral, 77
Hail, 65
Hair colouring of people, 114
Hangars, at Aspreto, 171 (plate)
Hapsburgs, 90
Haricots, 122
Havre, trade with, 179
Haze, 60
Head-shape of people, 114
Health, preservation of, 82–3
Heart disease, 77
Heath, 72
Henry II, of France, 89
Herbalists, 75
Hercynian age, structural features of, 8
Higher education, 118
Hippodrome de Vignetta, 45 (plate)
History, up to ninth century, 84–7; early Middle Ages, 88; under Genoa, 89–91; French Revolution and Napoleon, 91–2; relations with Fascist Italy, 92–3; since June 1940, 93–4
Hitler, 94
Holdings, size of, 120
Holly, 66 (plate)
Holy Roman Empire, 87 (fig.), 88
Holy See, 88
Honeysuckle, 72
Hood, Admiral, 90 (plate), 91
Hookworm, 81
Hornblende granite, 8–14 *passim*
Horses, 128
Hôtel Napoléon Bonaparte (Ile-Rousse), 138 (plate)
Hotels, 138 (and plate)
Houses, 109–13 (and plate)
Hydro-electricity, 131–2
'Hygiène, Bureaux municipaux d'', 75
Hygiene, *see* Public health

Idéa Corsa, 93
Igneous rocks, 3–18 *passim*
Ile, *see under* proper name
Ile-Rousse, berthing facilities at port, 163; coastal services, 140 (and fig.); dairies, 127; fishing, 128; golf-course, 138 (plate); history, 91; hotels, 138; industries, 128; level, survey, 187; lighthouse, 32 (fig.); maritime connexions, 140 (and fig.); population, 98, 194; port, 32 (fig.), 159, 163 (fig.), 164, 165 (fig.), 197; post-auto services, 146 (fig.); railway, 37, 150 (fig.), 153, 155, 197; roads, 37, 142 (fig.), 147, 148, 196, 197, 204, 205, 206; shipping, 176–8; situation, 36–7; tourist resort, 138; trade, 176–8; water supply, 163
Ile-Rousse, canton of, 193
Ile-Rousse, Danger de l', 165 (fig.)
Ile-Rousse, Grande, 33 (plate), 36, 163 (and plate), 165 (fig.)
Ilot, *see under* proper name
Incudine, Mt l', 14
Indies, West, emigration from Corsica to, 105
Industries, 129–30
Infant mortality, 76–7 (table)
Influenza, 77
'Ink disease', 125
Innocent II, Pope (1138), 88
Intensity of rain, 63–4
'Intérêt général' (railway), 148
'Intérêt local' (railway), 148
'Intérieur, Ministére de l',' 141
Intestinal worms, 80
Intrusive rocks, 6, 14, 15 (fig.), 16 (plate)
Inversion of temperature, 59
Inzecca, projected hydro-electrical station near, 133
Iron, mines of, 136 (fig.)
Irredentism, Italian, in Corsica, 92–4
Irrigation, effect on malaria, 79; for agriculture, 125
Isola Rossa, *see* Ile-Rousse
Isolaccio, 194
Italian, Armistice Commission (1940), 93; labour in Corsica, 109, 120; linguistic relations with Corsican dialect, 116; population in Corsica, 108–9
Italy, distance from Corsica, 1; irredentist policy, 92–4; occupation of Corsica (1942), 94; structural relations with Corsica, 6; trade with Corsica, 177
Itineraries, route, 203–7 (tables)

James, King of Aragon, becomes King of Corsica (1298), 88
Jetée, des Capucins (Ajaccio), 168, 169 (fig.), 170; de la Citadelle (Ajaccio), 168, 169 (fig.), 170, 176 (plate); du Dragon (Bastia), 161 (fig.); de Margonajo (Ajaccio), 44 (plate), 152, 168, 169 (fig.), 170; St Nicolas (Bastia), 161 (fig.); unnamed (Bastia), 161 (fig.); unnamed (Calvi), 166; unnamed (Macinaggio), 196; unnamed (Porto-Vecchio), 174; unnamed (Propriano), 172
Juniper, 72 (and plate), 73
Justice, medieval, 88–9, 115
Justinian, Emperor (6th century), 86

Kalaa, 87
Kessel von Tondo, 13 (plate)
Kessel von Trinbolaccia, 8 (plate), 65

La, *see under* proper name
Labour, agricultural, 119–20 (and table)
Lac, *see under* proper name
Lago, *see under* proper name
Lakes, 12
Lama, canton, 193
Land breezes, 55
Land utilization, 119 (and table), 129 (plate)
Landing facilities along coasts, 26, 196–201 (tables)
Langoustes, 128
Language, 116
Larghia, Capo, 8 (plate)
Larone, mine, 136 (fig.)
Latarriccio, 200
Latitude, 1
Laurestinus, 67, 72
Lava, Col de, 204
Lava, Golfe de, 13 (fig.), 32 (fig.), 40, 198
Laval, P., 93
Lavasina, 207
Lavender, 72
Lavezzi, Ile de, 1, 10 (fig.), 25 (fig.), 32 (fig.), 44
Lavezzo, Col de, 205
Le, *see under* proper name
Lead, mines of, 135–7 (and fig.)
Leather, 178 (plate)
Lecci, Col de, 205
Légale population, definition of, 95
Leghorn, 61, 93, 139, 140 (fig.), 156, 157 (fig.), 172
Lemons, 124
Lentisk, 67, 72
Lento, 204
Les, *see under* proper name
Levante, 55, 56

Levie, 194; quarries, 137
Levie, canton, 193
Liamone, R., 19 (fig.), 20, 21 (fig.), 25, 40, 204; projected hydro-electrical station, 133
Liamone valley, 98, 148, 202
Libeccio, 56 (and fig.)
Lifeboats, 49
Lifeboat stations, 49
Lighthouses, 29 (plate), 32 (fig.), 33 (plate), 49; *see also under* proper name
Ligurian Sea, 1, 26
Limestone, 6–7, 42–3, 45 (plate), 48 (plate), 73 (plate)
Linguizetta, mine 136 (fig.)
Lions, Gulf of, 51
Liqueurs, 129
Liscia, Golfe de la, 32 (fig.), 40, 198
Liscia, R., 40, 204
Liscia, valley, 25
Listincone, Col de, 204
Literary movements, 116
Livestock, 125–8
Livorno, *see* Leghorn
Lombards, 84, 86
Longa, R., 8 (plate)
Longa, valley, 202
Longitude, 1
Loreto di Tallano, 206
Losse, 33 (fig.)
Losse, Tour de, 33 (fig.), 207
Louis-du-Rhône, Port-St, trade with Corsica, 177, 178, 179
Lovo-Santo, Étang de, 46
Lozari, mine, 136 (fig.)
Lozari, Pont de, 205
Lozzi, population, 103, 194
Lucca, 109
Lucciana, 204
Lucerne, 126
Lucia, mine, 136
Lumio, 37, 147, 205
Luri, 194; mine, 136 (fig.); roads, 207
Luri, canton, 193
Luri, R., 21, 33
Luri, valley, agriculture in, 124
'Lycée de garçons', 118

Macaroni, 129
Macchia, 72
Macinaggio, 28 (plates), 33, 148, 196, 207; port, 28 (plates), 33, 148, 160, 178, 196; signal communications, 156–7
Macinaggio, Baie de, 16 (fig.), 28 (plates), 32 (fig.), 34, 196
Mackerel, 128
Maddalena, Arcipelago della, 44
Madonetta, Pta della, 42, 178 (plate)
Maestrale, 55, 57, 59
Maize, 112, 122
Maladetta levante, 57
Malaria, 78–80, 98
Malfalco, Anse de, 36
Manganello, Col de, 202
Manganese, mines of, 136 (fig.)
Mangano, Capo al, 9 (plate)
Maps, 186–92
Maquis, 5 (plate), 65, 72–3, 72 (plate), 73 (plate), 112, 115, 126, 130
Marais, *see under* proper name
Marble quarries, 137, 114 (plate)
Maréchal Foch, Place (Ajaccio), 170 (plate)
Margonajo, Jetée de, 44 (plate), 152, 168, 169 (fig.), 170
Mariana, 86
Marignane airport, 140 (and fig.), 172
Marinca, 207
Marine, 29, 32 (and plate), 37 (plate); *see also under* proper name
Maritime Alps, structural relations with Corsica, 6
Maritime connexions, 139–40 (and fig.)
Marriage system, 114
Marseilles, air connexions with Corsica, 140, 172; maritime connexions with Corsica, 139–40 (and fig.), 177; sanitary district of, 75; trade with Corsica, 129, 178–9
Marsh, 18, 26, 29, 35, 37, 41, 45, 46, 47, 167, 174–5; and agriculture, 119; and communications, 155–6; and disease, 79–80; and distribution of population, 98, 101; vegetation, 68, 74
Massa, William, Marquis of (A.D. 1020), 88
Massilia (6th cent. B.C.), 86
Matra, mines, 137
Mattoni, quarries, 137
Mazzola, 103
Meadows, 73, 119
Measles, 77
Medical services, 75–6
Mediterranean racial types, 113–14
Mediterranean Sea, 4, 46, 50
Melo, Lac de, 12; projected reservoir, 133
Melons, 122
Menhirs, 84
Meria, mines, 136 (fig.); wine, 123; roads, 207
Meria, Marine de, 207
Metal, road, 137
Metamorphic rocks, 14
Métayage, 119

Methods, agricultural, 121
Mezzavia, 147, 203, 204
Miamo, Marine de, 207
Mica schists, 11
Middle Ages, Corsica during, 88–9
Midwives, 75
Migliarello, Punte, 14
Milan, and occupation of Corsica, 89
Military administration (1938), 3
Milk, production of, 126–7
Mimosa, 67
Mineral springs, 129, 136 (fig.), 137–8; *see also under* proper name
Mineral waters, export of, 129
Minervia, 207
Minervia, Pta, 16 (fig.), 28 (fig.), 34
Mines, 135–7 (and fig.)
'Ministère de l'Intérieur', 141
'Ministère de la Santé Publique', 75
'Ministère des Travaux Publics', 49, 141
Minuta, Punta, 8 (plate), 14, 65
Misogno, Pont de, 204
Mistral, see *Maestrale*
Moca, 203
Moines, Les, 42
Moïta, canton, 193; mines, 137
Monacia d'Aullène, 194; roads, 203
Monte, *see under* proper name
Montecristo, island of, 26
Montemaggiore, 206
Moonrise, times of, 158
Moonset, times of, 158
Moors, raids in 16th cent., 89; influence on architecture, 111
Moral characteristics, 114
Moraschi, railway viaduct, 152
Morosaglia, 96, 194; roads, 48, 143, 204
Morosaglia, canton, 193
Morsetta, Capo della, 38
Morsiglia, roads, 207; wines, 123
Mortella, Mouillage de, 163 (fig.), 197
Mortella, Pte, 35, 36, 197
Moslems, raids on Corsica, 84, 86; empire, 85 (fig.)
Mosquitoes, 46, 78–80
Mouflon, 74
Mouillage, *see under* proper name
Mountains, list of, 14 (table)
Mucchio, 72
Mufro, 74
Mulberries, 125
Mules, 128
Mule-tracks, 141, 144 (fig.), 148, 202
Muntese, 55
Muratello, Col, 72
Murato, canton, 193; roads, 204
Murders, 115
Mureno, 129
Muro, 193; roads, 197, 205, 206
Muro, canton, 106, 193
Muro, Capo di, 13 (fig.), 28 (fig.), 40, 41, 166, 169 (fig.), 171 (fig.); coral near, 129
Muro, lighthouse, 49
Mussolini, 93, 94
Mutola, 114
'Mutual Crédit Agricole', 121
Muvra, A, 92, 93, 116
Myrtle, 67, 72

Naples, 61, 129
Napoleon Bonaparte, 91, 92
Napoléon, Cours (Ajaccio), 110
Nautical Almanac, 158
Navaccia, R., 22, 154
Navaccia, valley, 147, 202
Naval air base (at Aspreto), 170, 171 (plate)
'Navigazione Generale Italiana', 139
Nebbio, 23, 124
Nelson, Admiral, 90 (plate), 91
Nephritis, 77
Nero, Capo, 13 (fig.), 171 (fig.)
Neuhof, Baron Theodore von (1736), 90
Newspapers, 92-3, 116
Nice, maritime connexions, 139, 140 (fig.), 161, 177; trade with, 178–9
Nicholas V, Pope (1447), 89
Niolo, 23, 110 (plate), 114, 202; agriculture in, 120
Noceta, 16 (plate)
Nogalia, projected hydro-electrical station, 133
Nonza, coast near, 29 (plate); population, 193; roads, 148, 205, 207
Nord, Quai (Bastia), 156, 158 (plate), 161 (fig.), 162
Nordic racial type, 114
Nouveau Post (Bastia), 156, 161 (fig.)
Novella, 206
Novella, R., 21
Nuthatch, 74

Oak, evergreen, 68, 70, 72
Oats, 122
Ocana, 203
Ogliastro, 207
Oletta, 194; roads, 36, 197, 204, 205
Oletta, canton, 193
Olive, 71, 72 (and plate), 109, 115 (plate), 122, 123–4; fly, 123; oil refineries, 109, 129
Olivese, 129
Olmeto, mines, 136 (fig.); population, 194; roads, 142 (fig.), 145, 172 (fig.), 203
Olmeto, canton, 193

Olmi-Capella, 206
Olmi-Capella, canton, 193
Oltremontan dialect, 116
Omessa, population, 193; roads, 204
Omignia, Pte d', 28 (fig.)
Onions, 122
Ophthalmia, 82
Oranges, 124, 125
Orba, Paglia, *see* Paglia Orba
Orbia, Col d', 145, 203
Orbicular diorite, 137
Orbo-Almana, 25
Orbo, Fium', 19 (fig.), 22, 23, 47, 133, 205
Orbo, Fium', valley, 202
Oreccia, Col de, 202
Orezza, mineral springs, 129, 136 (fig.), 137, 138; railway station, 151, 156; roads, 205
Oriente, Punte dell', 14
Ornano, 25
Oro, Campo dell', 41, 45 (plate), 166, 168
Oro, Mt d', 9 (plate), 14, 22, 66 (plate), 72
Ortiporio, 204
Ortolo, Pont, 203
Ortolo, R., 19 (fig.), 20
Ortolo, valley, 42, 145
Osani, coalfield near, 6, 130; roads, 198, 205
Osiers, 74
Oso, R., 19 (fig.), 45, 174, 175 (fig.), 205
Ostriconi, R., 6, 15, 19 (fig.), 21, 23, 36, 205
Ota, 11 (fig.), 73 (plate), 205
Ota, Capo d', 11 (fig.)
Ovens, 112, 130
Ovis musimon, 74
Oxen, 128
Oysters, 128

Padro, Mt, 14
Padulella, 205
Paese, 23
Paglia Orba, 13 (plate), 14, 67 (plate)
Pagliazze, Marais de, 37
Palais, Place du (Bastia), 204, 205, 207
Palasca, 72 (plate), 157 (plate)
Palau (Sardinia), 139, 140 (fig.)
Palazzo, Ilot, 39
Palazzo, Pte, 28 (fig.), 38–9
Palmiers, Place des (Ajaccio), 170 (plate)
Palms, 67, 70, 114 (plate)
Palneca, population, 194; roads, 206
Palo, Étang de, 28 (fig.), 47
Pancheraccia, 206
Paoli, Boulevard (Bastia), 111
Paoli, Pasquale, 90–1, 163 (plate)
Papacy, medieval, 88
Paper, manufacture, 130
Parata, Pte della, 13 (fig.), 28 (fig.), 40, 41 (and plate)
Paratyphoid, 77
Pardina, 136 (fig.)
Parliament, French, representation in, 3
Parmarella, Col de, 147, 205
Partinello, 205
'Partito Corso Autonomista', 92
'Partito Corso d' Azione', 92
Partridge, 74
Passenger traffic, 177
Passes, across Corsica, 202 (table)
Pastes, edible, 129
Pastricciola, population, 194
Pasture, 73, 119, 125–6
Pâtes des merles, 74
Patrimonio, 123
Pays, 23
Peaches, 71, 124
Peaks, list of, 14 (table)
Pears, 124
Peas, 122
Pecorella, Roches de, 174, 175 (fig.)
Pecorile, 207
Pelone, 127
Pelusella, Pte, 198
Pepin (A.D. 806), 86
Peridotite, 6, 14, 15, 16 (fig.)
Pero-Casavecchie, canton, 193
Pertusato, Cap, 10 (fig.), 28 (fig.), 29, 31, 42, 44, 200; climatic statistics, 53, 57, 58, 62 (fig.), 63, 64, 65
Pétain, Marshal, 94
'Petit port des pêcheurs' (Ajaccio), 176 (plate)
Petrella, Col de, 202
Petreto-Bicchisano, population, 194; post-auto services, 146 (fig.); roads, 142 (fig.), 199
Phlebotomus, 80
Phocaea, 84
Physical characteristics of people, 114
Piana, 39; church at, 111 (plate); hotel at, 138; houses at, 111 (plate); population, 194; roads, 144 (plate), 147, 204; wines, 123
Piana, 205
Piana, Calanques de, 11, 12 (plate), 36 (plate), 144 (plate)
Piana, canton, 193
Pianosa, island of, 26
Pianottoli, 203
Picoaggia, 200
Piédicorte di Gaggio, 193

Piedicroce, mines, 136 (fig.); population, 193; roads, 48, 143
Pietracorbara, Marine de, 16 (fig.), 33 (fig.), 207
Pietra di Verde, canton, 130, 193
Pietralba, 205, 206
Pietranera, 207
Pietrapiana, 207
Pietrapola, mineral springs, 136 (fig.), 138
Pigmentation, 114
Pigs, 70, 127
Pila-Canale, 203
Pinarello, Golfe de, 32 (fig.), 44, 45, 147, 201
Pinarello, Ile de, 45
Pine, Corsican, 5 (plate), 66 (plates), 67 (plate), 71–2
Pino, 33, 148, 207
Pinus laricio, 71
Pinus nigra var. *Poiretiana*, 71
Pinus pinaster, 71
Pinus pinea, 71
Pinus sylvestris, 72
Pioggiola, 103
Pipes, manufacture of, 129
Pirates, Barbary, 98
Pisa, struggle with Genoa (12th–13th cent.), 84, 88; territory of, 87 (fig.)
Pisciatella, 41, 203
Place, *see under* proper name
Place-names, 208
Plain, east coast, 15–18 (and figs.), 17 (plate)
Planes, 114 (plate)
Plateau, submarine, near Corsica, 26
Plums, 124
Pneumonia, 77
Podestà, 88
Poets, 116
Poggio, 205
Poggio di Nazza, 205
Poggio di Venaco, 206
Pointe, *see under* proper name
Palasca, 72 (plate)
Polenta, 125
Poli, Bertino, 93
Polmona, Pont de la, 206
Ponente, 55
Pont, *see under* proper name
Ponte-Leccia, 14, 22; industry, 129; malaria, 79; mines, 136 (fig.); post-auto facilities, 146 (fig.); railway, 33 (plate), 37, 149, 150 (fig.), 151–5 *passim*, 166, 197; roads, 48, 72 (plate), 142 (fig.), 145, 148 (plate), 163, 204–6 *passim*; signal communications, 157
Ponte-Nuovo, defeat of Corsicans (1769), 91, 148 (plate); railway, 155 (fig.); roads, 48, 148 (plate), 204
Ponte-Nuovo, Gorges de, 155 (fig.)
'Ponts et Chaussées, Département des,' 3, 49, 141
Poplars, 74
Population, distribution, 95–108; altitudinal distribution, 101–3 (and fig.); of arrondissements, 194 (table); of cantons, 193 (table); changes, 103–8 (and figs.); of communes, 194–5; foreign, in Corsica, 108–9, 120, 130; geographical distribution, 98–101 (and fig.); physical features, 113–15; urban and rural, 95–6
Porphyries, quarried, 137
Port, Ilot du (Figari), 199
Porta, canton, 193
Porticchio, Pte de, 13 (fig.)
Porticciolo, Marine de, 207
Porto, 37 (plate), 197; coal mines, 6, 130, 136 (fig.); roads, 142 (fig.), 147, 205
Porto, Golfe de, 11, 21, 23, 28 (fig.), 32 (fig.), 36 (plate), 37 (plate), 39 (fig.), 116, 124, 144 (plate), 197
Porto, Marine de, 37 (plate)
Porto, R., 8 (plate), 19 (fig.), 25, 40
Porto, valley, 11 (fig.), 72 (plate), 73 (plate), 202
Porto Pollo, 203
Porto Pollo, Mouillage de, 32 (fig.), 199
Porto Pollo, Pte de, 41, 171 (fig.)
Porto Pollo, Tour de, 199
Porto-Torres (Sardinia), 139, 140 (fig.)
Porto-Vecchio, climate, 62; coastal services, 140; fishing, 128–9; industries, 128 (plate); level, survey, 187; malaria, 79–80; maritime connexions, 139–40; population, 194; port, 32 (fig.), 49 (plate), 159, 174–6 (and fig.), 200; post-auto services, 146 (fig.); railway, 149, 150 (fig.), 151, 153, 156, 196; roads, 43, 142 (fig.), 147, 200, 203, 205; salt production, 49 (plate), 137; shipping, 176–9; situation, 45; trade, 176–8; water supply, 174
Porto-Vecchio, canton, 106, 193
Porto-Vecchio, Golfe de, 28 (fig.), 44, 49 (plate), 174, 200
Ports:
  Corsican, *see* Ajaccio, Bastia, Bonifacio, Calvi, Centuri, Figari, Ile-Rousse, Macinaggio, Porto, Porto-Vecchio, Propriano, Prunete, Sagone, St Florent, Solenzara
  French mainland, trade with Corsica, 177–9

Post-auto service, 145, 146 (fig.)
Potatoes, 122
Pot-herbs, 122
Power, 130–5, *see also* Coal, Electricity, Gas
Pozzines, 73
Pozzo-di-Borgo, 137
Prato, Col de, 143
Prato, mines, 136 (fig.), 137
Pre-Cambrian rocks, 7 (fig.)
Présente population, definition of, 95
Preservation of health, measures for, 82–3
Pressure (atmospheric), 50–3
Prickly pear, 67, 72, 73 (plate)
Primary education, 117
Primeurs, 123
Primitive justice, 115, *see also* Banditry, *Vendetta*
Private schools, 117
Professors (at training colleges), 118
Propaganda, Italian, in Corsica, 93
Propriano, climate, 62; coastal services, 139–40 (and fig.); electrical power, 131, 134; fishing, 128; industries, 129; malaria, 79; population, 194; port, 29, 32 (fig.), 41, 159, 171 (fig.), 172, 178 (fig.), 199; post-auto services, 145; roads, 41, 42, 142, 169 (fig.), 203, 206; shipping, 176–8; trade, 178
Provençal architecture, 111
Prunelli di Cassaconi, hydro-electrical station, 131–2, 133, 134, 135
Prunelli di Fium' Orbo, 194
Prunelli di Fium' Orbo, canton, 193
Prunelli, R., 12, 19 (fig.), 20, 25, 41, 166, 203
Prunelli, valley, 41, 112 (fig.), 202
Prunete, 178, 205
Pruno, 196, 207
Public health, 75–83
Puerperal diseases, 77
Pulmonary tuberculosis, 77
Punic War (First) (250 B.C.), 86
Punta, *see under* proper name
Puntella, Roches de la, 165 (fig.)
Puzzichello, mineral springs, 129, 136 (fig.), 137
Pylons, for cables, 8 (plate)

Quai, Chambre de Commerce, de la (Ajaccio), 168; Est (Bastia), 161 (fig.), 162; Fango, du (Bastia), 161 (fig.), 162; Jetée de la Citadelle, de la (Ajaccio), 168; Marine, de la (Bastia), 161 (fig.); Napoléon (Ajaccio), 152; Nord, du (Bastia), 156, 161 (fig.), 162; Nord (Calvi), 166, 167 (fig.); Nord-Est (Bastia), 161 (fig.), 162; Ouest (Calvi), 166, 167 (fig.); Pêcheurs, des (Calvi), 166, 167 (fig.); République, de la (Ajaccio), 168; Rizi (Bastia), 161 (fig.), 162; Santé, de la (Bastia), 161 (fig.), 162; Sud, du (Bastia), 161 (fig.), 162; unnamed (Bonifacio), 173 (and fig.), 174; unnamed (Macinaggio), 28 (plate); unnamed (Porto-Vecchio), 49 (plate), 174, 175 (fig.); unnamed (Propriano), 171; unnamed (St Florent), 162 (plate)
Quail, 74
Quarantine anchorage (Ajaccio), 168, 169 (fig.)
Quarries, 135–7, 136 (fig.)
Quartier Pineto, sandspit of, 48
Quaternary rocks, 7 (fig.)
Quercus Ilex, 68, 70, 72
Quercus suber, 68, 70 (fig.)

Race-course (Ajaccio), 45 (plate)
Racial features, 113–15
Rade, *see under* proper name
Radio fog signals, 49
Raggiature, 53, 59
Railcars, 149 (plates), 151
Railway, 33 (plate), 37, 41, 43, 47, 48, 145 (plate), 197, 198, 200; general features, 149–51; geographical description, 152–6 (and figs.); history, 149
Rainfall, 20, 61–5 (and figs.)
Raven, 74
Realgar, mines of, 137; *see also* Arsenic
Regime of rivers, 20
Regino, R., 19 (fig.), 36, 138 (plate), 205; valley, 155, 202
'Région Radiophonique de Nice—Côte d' Azur', 156
Regional divisions, 23–5 (and fig.)
Religion, 116; administration of, 3
Rena Bianca, Pont de, 203
Renoso, Mt, 12, 14
Reptiles, 74
Reservoirs, projected, for hydro-electricity, 133; water supply, 81
Resin, 130
Restonica, Pont génois de la, 204
Restonica, R., 22, 110 (fig.), 133, 204, 206
Restonica, valley, 12
Revellata, lighthouse, 32 (fig.), 49
Revellata, Pte de, 28 (fig.), 29, 35, 37, 38, 167
Revinco, R., 23
Rhyolite, 6, 8

Riventosa, 204
Rivers, of Cap Corse, 21; of east coast, 22; general description, 18–20; of north and north-west coast, 21; regime, 20; of west coast, 20–1; work of, 11–12; *see also under* proper names
Riviera coast, 59
Rizzanèse, R., 17 (plate), 19 (fig.), 41, 203, 206; hydro-electrical station near, 131, 133, 135
Rizzanèse, valley, 98, 110 (plate), 145, 147, 202
Roads, 141–8 (and figs.); itineraries, 203–7 (tables); geographical description, 145–8
Roccapina, Cala di, 42
Roccapina, Pte de, 42
Rochers, *see under* proper name
Roches, *see under* proper name
Rocket throwing apparatus, 49
Rogliano, 12 (plate); population, 194; roads, 196, 207
Rogliano, canton, 193
Rolling stock (of railways), 151
Roman Catholic Church, 116
Roman Empire, 84, 85 (fig.), 86
Roman Empire, Holy, 87 (fig.), 88
Romanesque architecture, 111 (and plate)
Romanetti, 115
Rome, maritime connexions with, 139
Rondinara, Pte de la, 10 (fig.), 44
Roquefort cheese, 127
Roscana, Rochers de la, 45
Rosemary, 72
Rossa, Isola, *see* Ile-Rousse
Rosso, Capo, 8 (plate), 28 (fig.), 39, 40
Rotondo, Mt, 12, 14, 16 (plate)
Rousses, Iles, 28 (fig.), 35, 36, 167 (fig.)
'Route de Cap Corse', 139 (plate), 147–8
'Route des Sanguinaires', 41 (plate), 170
Routes forestières, 66 (plate), 141
Routes nationales, 141, 145–8 *passim*, 202
Ruja, Capo alla, 72 (plate)
Rural depopulation, 106–8
Rural population, 94–101
Russians, in Corsica (1931), 108

Sagone, 160; industry, 130; malaria, 79; post-auto services, 146 (fig.); roads, 142 (fig.), 198, 204
Sagone, Baie de, 40, 198
Sagone, Golfe de, 21 (fig.), 25, 28 (fig.), 32 (fig.), 40 (and plate), 147
Sagone, R., 21 (fig.), 40, 204
Sagone, Tour de, 198
Sagone, valley, 40
St Antoine, projected hydro-electrical station, 133
St Bastiano, Col de, 147, 204
St Columbane, Col de, 202
St Cyprien, Golfe de, 32 (fig.), 174, 175 (fig.), 201
St Cyprien, Ilot, 201
St Cyprien, Pte, 45
St Damiano, 37
St Florent, coastal services, 139, 140 (fig.); history, 91; lifeboat station, 49; malaria, 79; population, 195; port, 32 (fig. and plate), 159, 162 (plate), 163 (fig.), 164, 197; post-auto services, 146 (fig.); roads, 33, 142 (fig.), 145 (plate), 147–8, 196, 197, 204, 205, 207; rocket-throwing apparatus, 49; shipping, 176–8; signal communications, 156–7; trade, 176-8
St Florent, canton, 106, 194
St Florent, Golfe de, 15, 28 (fig.), 32 (plate), 29, 34, 35, 101, 163, 164 (fig.)
St François, Plage de (Ajaccio), 167 (plate)
St François, Pte, 36 (plate), 167 (fig.)
St Louis-du-Rhône, Port-, trade with, 177–9
Ste Lucie, 147, 156, 201
Ste Lucie de Porto-Vecchio, 205
St Marie, Banc de, 34
Ste Marie, Eglise (Bastia), 158 (plate)
Ste Marie, Rade de, 32 (fig.), 34, 196
St Marie, Tour (Cap Corse), 196
St Martino, Col, 204
St Nicolas (Bastia), Jétee, 158 (plate), 161 (fig.), 162
St Nicolas, Place (Bastia), 111, 114 (plate)
St Nicolas, Port (Bastia), 158 (plate), 159 (plate), 161 (fig.), 162
St Pierre, 202
Ste Reine, defile of, 12, 110 (plate)
St Teresa Gallura (Sardinia), signal communications, 157
Ste Trinité, 205
Sale, Étang del, 28 (fig.), 47
Salice, 193; railway bridge, 152
Salines, 49 (plate), 175 (fig.)
Salt, 137
Sambucuccio (11th cent.), 88
Sampiero (d. 1568), 90
'Sampiero', 158 (plate), 159
Sampolo, projected reservoir, 133
San Bernadino, Col de, 148, 207
San Catero Cervone, Col de, 204
San Cesareo, Col de, 206
San Colombano, Col de, 206
San Damiano, Ile de, 48
San Fiorenzo, *see* St Florent

San Gavino di Carbini, 195
San Giorgio, Col de, 145, 203
San Giorgio, Company of (1453), 89
San Lorenzo, canton, 193; village, 204
San Nicolao, canton, 193; village, 205
San Pietro, Mt, 14
San Quilico, Col de, 152, 204
Sandfly fever, 80
Sandstones, 15, 18
Sanguinaire, Ile Grande, 40, 41 (plate)
Sanguinaires, Iles, 13 (fig.), 28 (fig.), 40, 41 (plate), 166; climatic statistics, 55–65 *passim*
Sanguinaires, lighthouse, 31 (fig.), 49, 157 (and fig.)
Sanguinaires, Passe des, 41 (plate)
Sanguinaires, 'Route des', 41 (and plate), 170
Sta Lucia di Tallano, population, 195; roads, 206
Sta Lucia di Tallano, canton, 193
Sta Manza, Golfe de, 10 (fig.), 28 (fig.), 32 (fig.), 44, 173 (fig.), 200
Sta Manza, Port de, 43, 45; projected hydro-electrical station, 133
Sta Maria di Lota, 207
Sta Maria di Lota, canton, 193
Sta Maria Siché, 195; post-auto services, 146 (fig.); roads, 142 (fig.), 203
Sta Maria Siché, canton, 193
Sta Reparata di Balagna, 195
Sta Severa, 207
Sto Pietro di Tenda, 195; roads, 36, 205
Sto Pietro di Tenda, canton, 193
Sanitary districts, 75
Sanitation, 82
Sardinia, climate, 50, 51; dialects, 116; economic development, 92; history, 88, 91, 93; maritime connexions, 139, 140 (fig.); position, 1, 26, 44, 71; structure, 4, 26; trade, 177; vegetation, 67
Sari d' Orcino, canton, 193
Sarrola-Carcopino, 204
Sarrola-Carcopino, canton, 193
Sarsaparilla, 72
Sartène, 17 (plate), 110 (and plate); health administration, 75; population, 195; post-auto services, 146 (fig.); roads, 41, 42, 43, 142 (fig.), 145, 171 (fig.), 172, 174, 198, 199, 200, 203–6 *passim*
Sartène, arrondissement, area, 1; cantons in, 1, 193; communes in, 1, 196; dispersed population, 98, 99 (fig.); population, 95, 106, 193; telegraphic facilities, 157; telephonic facilities, 157; water supply, 81
Sartène, canton, 106, 193
Sartène et d' Ortolo, Pays de, 25
Scandola, Pte, 28 (fig.), 39
'Schistes lustrés', 4, 7 (fig.), 14, 15 (fig.)
Schists, 14, 15, 16 (fig.), 16 (plate)
Schools, 117–18
Scirocco, 55, 56 (fig.), 57, 59
Scoglietti, Les, 13 (fig.), 41, 168, 171 (plate)
Scrub, *see Maquis*
Sea, state of, 57–8
Sea breezes, 55
Seasonal vegetation changes, 66
Secco, Fiume, 35, 37, 205
Secco, Pont du, 204
Secondary education, 117
Sedimentary rocks, 6, 8, 15–18
Senators, 3
Senetosa, Capo, 28 (fig.), 42; lighthouse, 32 (fig.), 49
Senino, Cap, 40
Senino, Mt, 40
Seria, Bocca, 205
Sermano, 193
Serpentine, 6, 11, 14, 16, 137
Serra, Col de la (Cap Corse), 148, 207
Serra, Col de la (near Vivario), 204, 206
Serra di Scopamène, 195; roads, 206
Serra di Scopamène, canton, 193
Serriera, 205
'Service de la Compagnie Sarda', 139
'Service Géographique de l'Armée', 187–90 *passim*
Services, Air, 140 (and fig.)
'Services Autocars de la S.N.C.F.', 145, 146 (fig.)
Services, coastal, 139–40
'Services Côtiers de la Compagnie Fraissinet', 139–40
Services, railway, 149, 151
Sète, trade with, 177, 179
Sette Nave, Pte de, 13 (fig.), 40
Settlements, 109–13
Sevi, Pays de, 23
Sheep, 126, 129 (plate)
Shelter, 26–9, 57, 196–201 (tables)
Shipping, 176–8
Ships, registered in Corsica, 177
Sicily, 6
Sicota, Ile, 33 (plate), 36, 163 (plate), 164, 165 (fig.)
Signal communications: aero-radio stations, 157; radio fog signals, 49; telegraphic system, 156–7, 203–7 *passim*; telephonic system, 156–7, 203–7 *passim*
Silk, 125
Silver, mines of, 135–7 (and fig.)

Silver-lead, mines of, 136 (fig.)
Sirocco, see *Scirocco*
Sisco, Marine de, 207
Sitone, R., 202
Sitta whiteheadi, 74
Situation, geographical, 1
Snipe, 74
Snow-cover, 8 (and plate), 13 (plate), 65
Snowfall, 8, 59, 65; effect on rivers, 20; effect on roads, 145
Snowfields, Quaternary, 12
Soccia, canton of, 193
'Société Corse d'Industries Réunis', 131, 134 (fig.)
'Société d'Électricité de la Corse', 134 (fig.)
'Société Méridionale d'Éclairage et de Force', 134 (fig.)
'Société des Mines et Produits Chimiques des Alpes-Maritimes', 137
'Société Nationale des Chemins de Fer Français' (S.N.C.F.), 138, 145, 149, 178, 180
Sodium carbonate (in springs), 137
Sodium sulphate (in springs), 137–8
Solaro, 15; population, 195; roads, 205
Sole, 128
Solella, Pont de, 204
Solenzara, 6, 15, 22, 32, 46, 47, 116; mines, 136, 137 (fig.); port, 32 (fig.), 178, 201; post-auto services, 146 (fig.); railway, 150 (fig.), 151, 156, 176; river, 19 (fig.), 47, 205; roads, 142 (fig.), 147, 200, 201, 205
Sollacaro, population, 195; roads, 203
Sorba, Col de, 143, 147, 206
Sorbollano, hydro-electrical station, 131, 133, 134 (fig.), 135
Sotta, 45, 205
Soveria, railway, 152; roads, 204
Spada, 115
Spain, distance from Corsica, 1; relations with Corsica in 16th cent., 87 (fig.), 88–9; *see also* Aragon
Spaniards, in Corsica (1931), 108
Spanish architecture, 111; words in Corsican dialect, 116
Spanish broom, 72
Spano, Ilot de, 37
Speloncato, 206
Springs, of drinking water, 81; mineral, 136 (fig.), 137–8
Stabiacco, R., 19 (fig.), 45, 174, 175 (fig.), 205
Stabiacco, valley, 156, 202
Stacks, 48 (plate)
Stagno, *see* Étang
Stagnolo, Baie de, 175 (fig.)
Stantare, 84
Stations, railway, 148, 150, 152, 203–7 *passim*
Statistics, vital, 76–7
Stature, of people, 114
'Stazzona del Diavole', 84
Stello, Mt, 14, 187
Stone, building, 137
Straits, *see under* proper name
Stranciacone, R., 12
Strappato, R., 154
Strawberries, 124
Streets in Corsican towns, 109–13
Structural evolution, 4–6, 26
Submergence (of coasts), 4, 6, 27
Suicide, 77
Suleiman, the Magnificent (1553), 90
Sulphur, 135–7 (and fig.)
Sulphurous springs, 137
'Summer Time', 157
Sunrise, times of, 158
Sunset, times of, 158
Sunshine, 60, 66; effect on health, 78; effect on fruit cultivation, 124
Supreme Council of the Twelve, 88
Surgeons, dental, 75
Sus scrofa, 74
Swell (sea), 57–8

Taccana, Bains de, 203
Taenia solim, 81
Tafonato, Capo, 14
Tafoni, 8
Tagnone, R., 22
Taïta, Col de, 202
Tallano, 123
Tallone, 205
Tamarisks, 70
Tamarone, Baie de, 32 (fig.), 34, 196
Tamarone, Sommet de, 196
Tangerines, 124–5
Tannic acid, 129, 179
Tapeworm, 81
Taravo, R., 18, 19 (fig.), 20, 41, 133, 203
Taravo, valley, 25, 98, 145, 148, 199
Tarco, R., 205
Tartagine, Col de, 12 (plate), 202
Tartagine, mines, 136 (fig.)
Tartagine, R., 22, 23, 153, 154
Tartagine, valley, 202
Tattone, 204
Tavignano, Pont de la, 204
Tavignano, R., 14, 18, 19 (fig.), 22, 23, 47, 79, 86, 110 (fig.), 133, 147, 148 (plate), 152, 205, 206; estuary, 147; gorge, 144 (fig.)
Tavignano, valley, 5 (plate), 12, 15, 145, 152, 202

Teachers, 117–18
Teghime, Col de, 36, 145 (plate), 147, 205
Telegrafo, 93
Telegraphic facilities, 156–7, 203–7 *passim*
Telephonic facilities, 145 (plate), 156–7, 203–7 *passim*
Telpherways, 141
Temperature, 8, 58–9
Terraced cultivation, 29 (plate), 73 (plate), 91 (plate), 115 (plate), 119, 129 (plate)
Terra di Commune, 88
Terranova (Sardinia), maritime connexions with Corsica, 139, 140 (fig.)
Tertian malaria, 79
Tertiary rocks, 7 (fig.), 15
Testa, Col de la, 203
Thunderstorms, 64–5
Thyme, 72
Timber, production, 68–72, 141; export, 178 (plate), 179
Time, 157–8
Tivarello, 203
Tizzano, 42, 203
Tobacco, 123; manufacture, 109, 129
Tolla, 109, 112 (fig.); projected hydro-electrical station, 133
Tollare, 34
Tomatoes, 122
Tondo, Kessel von, 13 (plate)
Toulon, maritime connexions with Corsica, 139, 140 (fig.); naval base, 160; signal communications with Corsica, 156–7; trade with Corsica, 177
Tourist industry, 138 (and plate), 170, 180
Towers, Genoese, 33 (fig.), 41 (plate), 111
Tozzo, Mt, 14, 67 (plate)
Trachoma, 80
Trade, 176–80
Traffic, railway, 151
Traghieta, Pont de, 204
Trajetti-Giovanni, projected hydro-electrical station, 133
Tralonca, 204
Tramontana, 55, 56 (and fig.), 57, 59, 65
Transhumance, 126
Transport, *see* Communications
Traunato Mt, 14
'Travaux Publics, Ministère des', 49, 141
Travo, R., 19 (fig.), 47, 205
Travo, valley, 23, 202
Triassic rocks, 7 (fig.)
Trinbolaccia, Kessel von, 8 (plate), 65
Trinité, projected hydro-electrical station at, 133
Trout, 74
Truffles, 122
Truggia, 133
Tuberculosis, 77
Tula, Col de, 202
Tunis, air connexion, 140 (and fig.), 171; distance from Corsica, 1; maritime connexions, 139, 140 (and fig.); trade with, 178
Tunnels, 141–56 *passim*
Tunny, red, 128
Turkey, relations with Corsica (16th cent.), 90
Turpentine, 130
Tuscan, coast, 59; dialect, 116; islands, 6
Tuscany, Count Boniface of (828), 86
Twelve, Supreme Council of the (11th cent.), 88
Typhoid, 77
Tyrrhenian islands, 67
Tyrrhenian Sea, 1

Uccello, Capo, 13 (plate),
Ucciani, 195; railway, 152
Ucciani, Pont de, 204
Undulant fever, 80
Uniate Greek Church, 116
'Union Électrique Rurale, l'', 133, 134 (fig.)
United States, emigration from Corsica to, 105
Upper Palaeozoic rocks, 7 (fig.)
Urbalacone, 203
Urban population, 94–108 *passim*
Urbino, Étang d', 28 (fig.), 47, 147

Vaccajo, 206
Vacca Morta, Sommet della, 44
Vaccia, Col de la, 143, 147, 206
Val, *see under* proper name
Valdo-Niello, Forêt de, 66 (plate), 67 (plate), 68, 69 (fig.)
Valinco, Golfe de, 28 (fig.), 41, 129, 145, 171 (fig.), 172
Vallitone, Pte, 37
Vandals, 84, 86; kingdom of (*c*. A.D. 500), 85 (fig.)
Vaults, burial, 112
Vecchia, R., 13 (plate)
Vecchiaja, Pte, 35
Vecchio, R., 22, 133, 152, 153 (fig.), 154 (fig.), 206
Vecchio, valley, 202
Vegetables, 122, 123

Vegetation, natural, 67–74; general features, 67–8; woodland, 68–72, 119 (and figs.); *maquis*, 72–3; pasture, 73, 119; alpine vegetation, 73–4; swamp vegetation, 74; *see also under* proper names of Forêts and of plants, *Maquis*
Venaco, 195; railway, 150 (fig.), 152, 153 (fig.), 154 (fig.); roads, 204, 206
Venaco, canton, 193
Vendetta, 89, 91, 111, 115
Ventilegne, Golfe de, 10 (fig.), 41, 42, 145, 173, 203
Ventilegne, Pont de, 203
Ventilegne, R., 42
Ventiseri, 205
Venzolasco, mines, 136 (fig.); population, 195
Verde antique, 137
Verde, Foca di, 145, 147, 206
Vergio, Col de, 22, 40, 67 (plate), 72 (plate), 202
Vescovato, 195; roads, 205
Vescovato, canton, 193
Vetta, Capo alla, 8 (and plate)
Vezzani, 195; roads, 205
Vezzani, canton, 193
Viaducts, 141–56 *passim*
Vicario, 146
Vichy regime, administration under, 3; economic conditions under, 138; political conditions under, 93–4
Vico, climate, 61, 64; population, 195; roads, 204
Vico, canton, 193
Vieux Port (Bastia), 110, 158 (plate), 159 (plate), 161 (fig.)
Vignale, 205
Vignetta, Hippodrome de, 45 (plate)
Vignolo, R., 22
Ville, Mouillage de la (Ajaccio), 167 (plate), 168, 169 (fig.), 170 (plate), 171 (plate)
Ville di Paraso, 206
Ville haute, at Bastia, 110; at Corte, 110 (fig.)
Vincentello d'Istria (15th cent.), 89
Vines, 32 (plate), 122 (fig.), 123
Vin ordinaire, 81, 123
Viro valley, 67 (plate)
Visibility, 60
Vital statistics, 76–7
Vivario, Pont de, 204
Vivario, railway, 152, 153 (fig.), 154 (fig.); roads, 142 (fig.), 143, 204, 206
Vizzavone, climate, 61, 62 (fig.), 63, 64; Neolithic remains near, 114
Vizzavone, Col de, roads, 41, 145 (and plate), 202, 204; railway, 152
Vizzavone, Forêt de, 9 (plate), 66 (plate), 68, 69 (fig.)
Voie des Quais (Bastia), 156

Walnuts, 124
Watershed, 18–19
Water supply, 79, 81, 139 (plate), 162, 163, 168, 174
Waters, mineral, 129; *see also* Springs, mineral
Weathering, 8–11, 12
Wells (drinking water), 81
West Indies, emigration from Corsica to, 105
Wheat, 73, 112, 122
Wild boar, 74
Winds, 50–7; land and sea, 55; local, 55–7; *see also Gregale, Levante, Libeccio, Maestrale, Ponente, Raggiature, Scirocco, Tramontana*
Wine, 123, 178 (plate); imports of, 178; *see also* Vines
Woodcock, 74
Woodland, 68–72 (and figs.), 119; *see also* Forests
Worms, intestinal, 80
Writers, 116

Xerophytic vegetation, 67

Zerubia, 206
Zicavo, 195; post-auto services, 146 (fig.); roads, 142 (fig.), 143, 206
Zicavo, canton, 193
Zigliara, 203
Ziglioni, Ile, 174, 175 (fig.)
Zircon-syenite, 137
Zoico, R., projected hydro-electrical station, 133
Zones, altitudinal, climate, 66; vegetation, 68–72
Zonza, 195; post-auto services, 146 (fig.); roads, 45, 71 (fig.), 142 (fig.), 205; tourist industry, 138
Zoza, projected hydro-electrical stations, 133

PRINTED UNDER THE AUTHORITY OF H.M. STATIONERY OFFICE
AT THE UNIVERSITY PRESS, CAMBRIDGE

3 (fig
43, 22
(fig.
114
41, 14
, 152
e), 66
56

(pla

also S

from C

ea, 55
Le
e, Rag

ports of

gs.), 11

service
43, 20

)

dro-el

66;

es, 14
(fig.

rical s

DC 611 .C81 G68
Corsica
Stanford University Libraries
3 6105 041 393 237

DC
611
C81 G68

CECIL H. GREEN LIBRARY
STANFORD UNIVERSITY LIBRARIES
STANFORD, CALIFORNIA 94305-6004
(650) 723-1493
grncirc@sulmail.stanford.edu
All books are subject to recall.
DATE DUE

NOV 18 1999
OCT 25 1999